

STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 134481

TO: Zohreh Fay
Location: 3a61 / 3c70
Wednesday, October 13, 2004
Art Unit: 1614
Phone: 272-0573
Serial Number: 10 / 644870

From: Jan Delaval
Location: Biotech-Chem Library
Rem 1A51
Phone: 272-2504

jan.delaval@uspto.gov

Search Notes

Access DB#

134481

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Joseph Fay Examiner #: 66646 Date: 10/5/04
 Att Unit: 1614 Phone Number: 3052122053 Serial Number: 101644,870
 Mail Box and Bldg Room Location: 3C70 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Eye drop Composition

Inventors (please provide full names): Ueno, Ryuji

Earliest Priority Filing Date: 8/21/02

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

please search the composition
and method of use.

Jan

STAFF USE ONLY

| | Type of Search | Vendors and cost where applicable |
|---------------------------------------|---|---|
| Searcher: <u>Jan</u> | NA Sequence (#) | STN <input checked="" type="checkbox"/> |
| Searcher Phone #: <u>22504</u> | AA Sequence (#) | Dialog |
| Searcher Location | Structure (#) <input checked="" type="checkbox"/> | Questel/Orbit |
| Date Searcher Picked Up: <u>10/13</u> | Bibliographic | Dr. Link |
| Time Completed: <u>10/13</u> | Litigation | Lexis/Nexis |
| Searcher Prep & Review Time | Fulltext | Sequence Systems |
| Patent Prep Time: <u>15</u> | Patent Family | WWW/Internet |
| Online Fee: <u>4.70</u> | Other | Other (specify) |

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:32:37 ON 13 OCT 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2004 HIGHEST RN 760932-70-5

DICTIONARY FILE UPDATES: 11 OCT 2004 HIGHEST RN 760932-70-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

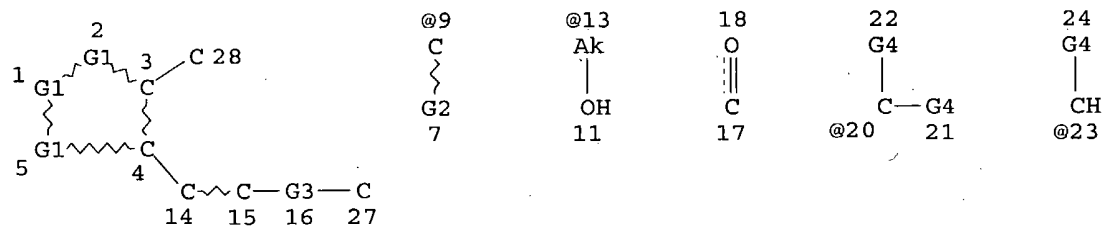
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta.que l9

L6 STR



26
Ak
|
O
@25

VAR G1=C/9

VAR G2=O/X/AK/13

VAR G3=C/23/20

VAR G4=OH/X/AK/25/13

NODE ATTRIBUTES:

NSPEC IS RC AT 27

CONNECT IS M1 RC AT 27

CONNECT IS M1 RC AT 28

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

L9 34244 SEA FILE=REGISTRY SSS FUL L6

100.0% PROCESSED 388231 ITERATIONS

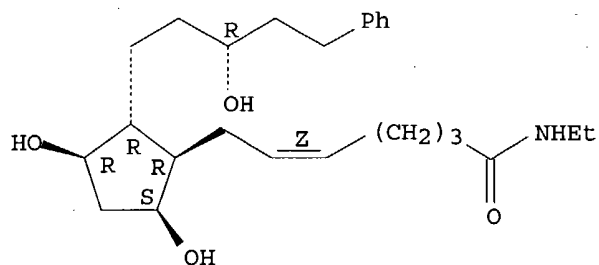
34244 ANSWERS

SEARCH TIME: 00.00.11

=> d l12 ide can tot

L12 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
RN 607351-44-0 REGISTRY
CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H39 N O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

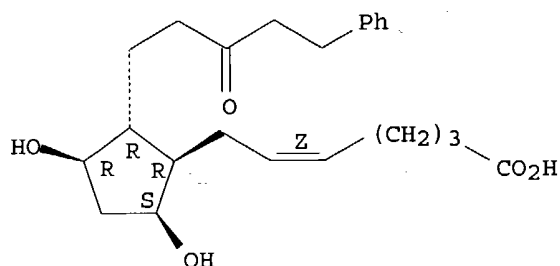
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:344877

REFERENCE 2: 139:296971

L12 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
RN 369585-22-8 REGISTRY
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C23 H32 O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:212793

REFERENCE 2: 140:344877

REFERENCE 3: 136:299713

REFERENCE 4: 136:178021

REFERENCE 5: 135:327373

L12 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 163075-10-3 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-[3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, [1R-[1α(Z),2β(R*),3α,5α]]-

OTHER NAMES:

CN 13,14-Dihydrofluprostenol isopropyl ester

FS STEREOSEARCH

MF C26 H37 F3 O6

SR CA

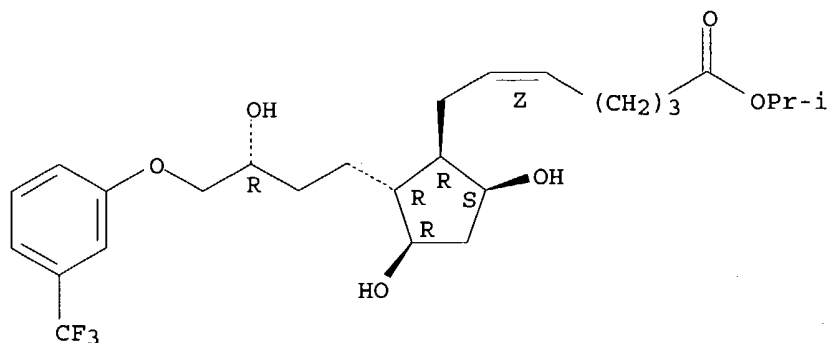
LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:344877

REFERENCE 2: 138:368671

REFERENCE 3: 134:162867

REFERENCE 4: 122:290579

L12 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 130209-82-4 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-hydroxy-5-phenylpentyl)cyclopentyl]-, 1-methylethyl ester, [1R-[1 α (Z), 2 β (R*), 3 α , 5 α]]-

OTHER NAMES:

CN 5: PN: WO03079997 PAGE: 17 claimed sequence

CN Latanoprost

CN PhXA 41

CN XA 41

CN Xalatan

FS STEREOSEARCH

DR 144489-49-6

MF C26 H40 O5

CI COM

SR CA

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHM, DDFU, DIOGENES, DRUGU, EMBASE, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PROMT, PROUSDDR, PS, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)

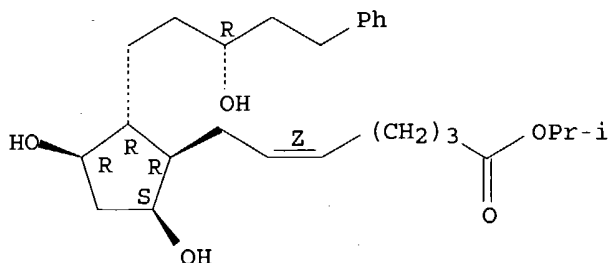
DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

325 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
327 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:254451
REFERENCE 2: 141:230312
REFERENCE 3: 141:218906
REFERENCE 4: 141:185135
REFERENCE 5: 141:179214
REFERENCE 6: 141:179203
REFERENCE 7: 141:167661
REFERENCE 8: 141:150902
REFERENCE 9: 141:134031
REFERENCE 10: 141:134030

L12 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 120373-36-6 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, [1R-[1 α (Z),2 β ,3 α ,5 α]]-

OTHER NAMES:

CN Unoprostone

FS STEREOSEARCH

MF C22 H38 O5

CI COM

SR CA

LC STN Files: ADISNEWS, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CIN, CSCHM, DIOGENES, IMSPATENTS, IMSRESEARCH, IPA, MRCK*, PROMT, PROUSDDR, PS, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)

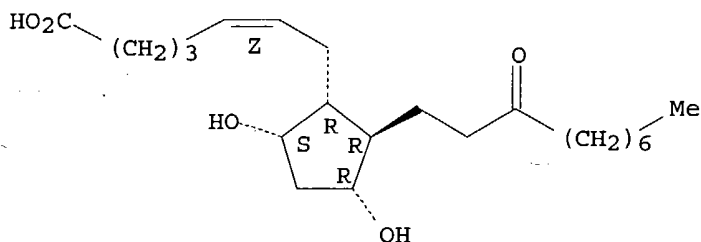
Other Sources: WHO

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT

(Reactant or reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.
 Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

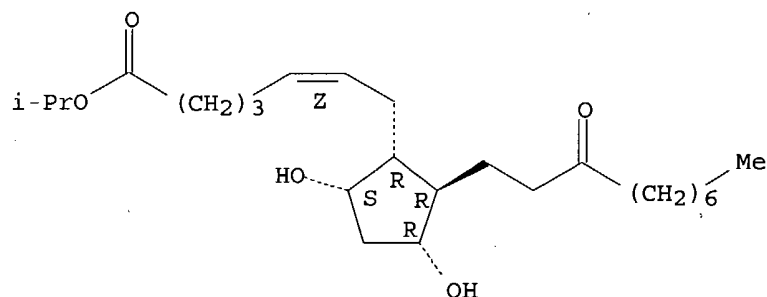
67 REFERENCES IN FILE CA (1907 TO DATE)
 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 67 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185135
 REFERENCE 2: 141:134031
 REFERENCE 3: 141:17495
 REFERENCE 4: 141:7107
 REFERENCE 5: 140:417845
 REFERENCE 6: 140:391155
 REFERENCE 7: 140:391154
 REFERENCE 8: 140:344877
 REFERENCE 9: 140:280509
 REFERENCE 10: 140:264877

L12 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 120373-24-2 REGISTRY
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, [1R-[1 α (Z),2 β ,3 α ,5 α]]-
 OTHER NAMES:
 CN 13,14-Dihydro-15-keto-20-ethyl-PGF2
 CN Isopropyl unoprostone
 CN Rescula
 CN UF 021

CN Unoprostone isopropyl ester
 FS STEREOSEARCH
 MF C25 H44 O5
 CI COM
 SR CA
 LC STN Files: ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CIN, CSCHM, DIOGENES, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MRCK*, PHAR, PROMT, PROUSDDR, PS, RTECS*, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA CAplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry.
 Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

121 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 121 REFERENCES IN FILE CAPLUS (1907 TO DATE)

| | | |
|-----------|-----|------------|
| REFERENCE | 1: | 141:117076 |
| REFERENCE | 2: | 141:47249 |
| REFERENCE | 3: | 141:7107 |
| REFERENCE | 4: | 140:391155 |
| REFERENCE | 5: | 140:391154 |
| REFERENCE | 6: | 140:344877 |
| REFERENCE | 7: | 140:264877 |
| REFERENCE | 8: | 140:253553 |
| REFERENCE | 9: | 140:228482 |
| REFERENCE | 10: | 140:223330 |

=> d his

(FILE 'HOME' ENTERED AT 09:16:06 ON 13 OCT 2004)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:16:15 ON 13 OCT 2004

L1 1 S US20040076678/PN OR (US2003-644870# OR US2002-404779#)/AP,PRN
E UENO R/AU
L2 207 S E3,E23
E SUCAMPO/PA,CS
L3 23 S E3-E22
SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:18:56 ON 13 OCT 2004

L4 11 S E1-E11
L5 6 S L4 AND C5/ES
L6 STR
L7 0 S L6 CSS
L8 50 S L6 SAM
L9 34244 S L6 FUL
SAV TEMP L9 FAY644/A
L10 STR L6
L11 0 S L10 CSS SAM SUB=L9
L12 6 S L4 AND L9
L13 1 S 9002-89-5
L14 1 S 56-81-5
L15 1 S 9004-34-6
L16 6694 S 9004-34-6/CRN
L17 1391 S ?CELLULOS?/CNS NOT L16
L18 806 S L17 NOT SQL/FA
L19 2 S (ACRYLIC ACID OR METHACRYLIC ACID)/CN
SEL RN
L20 91653 S E12-E13/CRN
L21 88521 S L20 AND (C4H6O2 OR C3H4O2)
L22 21 S L21 AND 1/NC NOT IDS/CI
L23 9 S L22 NOT HOMOPOLYMER
L24 12 S L22 NOT L23
L25 7 S L24 NOT (CYCLODEXTRIN OR N/ELS OR OC4/ES)
L26 6 S L25 NOT C10H22O7
L27 1 S 9005-65-6
E SORBITAN
L28 756 S E3
L29 433 S L28 AND ETHANEDIYL
L30 323 S L28 NOT L29
L31 169 S L30 AND 1/NC
L32 10 S L31 NOT (IDS/CI OR COMPD OR WITH)
L33 1 S L32 AND OXYMETHYLENE
L34 182 S L29 AND 1/NC NOT (IDS/CI OR COMPD OR WITH)
E POLYSORBATE
L35 21 S E3
L36 9 S L35 AND 1/NC NOT (MXS/CI OR C6/ES OR NC4/ES)
L37 33594 S L9 NOT ((MXS OR PMS OR IDS)/CI OR COMPD OR WITH OR UNSPECIFIE
L38 33263 S L37 AND 1/NC
L39 331 S L37 NOT L38
L40 33257 S L38 NOT L12

FILE 'HCAPLUS' ENTERED AT 09:50:09 ON 13 OCT 2004

L41 419 S L12
L42 418 S LATANOPROST OR PHXA41 OR PH() (XA41 OR XA 41) OR XA41 OR XA 41
L43 39 S ISOPROPYLUNOPROSTONE OR ISOPROPYL UNOPROSTONE
L44 409 S L39
L45 49180 S L40
E PROSTAGLANDIN/CT

L46 17 S E3
 L47 39277 S E4,E5,E7,E10,E13,E16,E17,E28,E30,E31,E33,E36,E39
 L48 31687 S E63
 L49 5095 S E64-E67,E69,E70
 E E63+ALL
 L50 68728 S E4,E3+NT
 L51 74694 S L41-L50
 E ACRYLIC POLYMER/CT
 E E3+ALL
 L52 47858 S E2
 E E2+ALL
 L53 40 S L51 AND L52
 L54 80 S L51 AND L19,L26
 L55 77 S L51 AND L13
 L56 167 S L51 AND L14
 L57 104 S L51 AND L15
 L58 227 S L51 AND L16
 L59 201 S L51 AND L18
 E POLYLACTAM/CT
 E E4+ALL
 L60 1 S L51 AND E2
 E LACTAM/CT
 L61 0 S L51 AND E32
 L62 29 S L51 AND E22
 L63 24 S L51 AND E23-E31,E34
 L64 81 S L51 AND L27,L33,L34,L36
 L65 41 S L64 AND L53-L60,L62,L63
 L66 599 S L53-L64
 L67 3 S L66 AND L1-L3
 L68 23 S L66 AND VISCOSITY
 L69 32 S L66 AND VISCO?
 L70 32 S L68,L69
 L71 1 S L67 AND L70
 L72 81 S L66 AND L27,L33,L34,L36
 L73 110 S L70,L72
 E EYE/CW
 L74 74378 S E3,E7,E9,E11,E12
 L75 79161 S EYE+OLD,NT,PFT,RT/CT
 L76 89281 S EYE, DISEASE+OLD,NT,PFT,RT/CT
 E EYE+ALL/CT
 L77 75310 S E8,E7+NT
 L78 12626 S E26+OLD,NT
 L79 1870 S E27+OLD,NT
 L80 4225 S E28+OLD,NT
 E E25+ALL
 L81 32125 S E8,E9,E7+NT
 L82 28 S L73 AND L74-L81
 L83 30 S L73 AND (EYE? OR ?OCULAR? OR ?OPHTHALM?)
 L84 41 S L67,L71,L82,L83
 L85 69 S L73 NOT L84
 SEL DN AN 31 39
 L86 2 S E1-E6 AND L85
 L87 12 S L84 AND EYE?/CW
 L88 10 S L84 AND (EYE? OR OCULAR? OR OPHTHALM?)/TI
 L89 1 S L84 AND OPHTHALM?/TI
 L90 20 S L87-L89
 L91 21 S L84 NOT L90
 L92 2 S L91 AND GLAUCOM?
 L93 19 S L91 NOT L92
 L94 6 S L93 AND OPHTHALMIC
 L95 30 S L86,L67,L71,L90,L92,L94
 L96 13 S L84 NOT L95
 L97 1 S L96 AND EYE NOT IRRITATION TEST

L98 31 S L95,L97
L99 29 S L98 AND (PD<=20020821 OR PRD<=20020821 OR AD<=20020821)
L100 2 S L98 NOT L99
L101 31 S L98-L100
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:25:44 ON 13 OCT 2004

L102 55 S E7-E61
L103 22 S L102 AND L9
L104 33 S L102 NOT L103
L105 28 S L104 AND L13-L16,L19,L26,L27,L33,L34,L36
L106 5 S L104 NOT L105
L107 21 S L103 NOT C20H38O2

FILE 'HCAPLUS' ENTERED AT 10:29:28 ON 13 OCT 2004

L108 38248 S L107
L109 226 S L105 AND L108
L110 19 S L101 AND L109
L111 3 S L106 AND L101
L112 1 S L111 AND VISCOUS OPHTHALMIC PHARMACEUTICAL
L113 20 S L110,L112
L114 11 S L101 NOT L111,L113
L115 2 S L111 NOT L112
L116 29 S L113,L114 NOT L115

FILE 'REGISTRY' ENTERED AT 10:32:37 ON 13 OCT 2004

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:32:54 ON 13 OCT 2004

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FILE COVERS 1907 - 13 Oct 2004 VOL 141 ISS 16

FILE LAST UPDATED: 12 Oct 2004 (20041012/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l116 all hitstr tot

L116 ANSWER 1 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:354690 HCAPLUS
DN 140:315111
ED Entered STN: 30 Apr 2004
TI Method using **latanoprost** for the treatment of ocular hypertension and glaucoma
IN **Ueno, Ryuji**
PA USA
SO U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO

DT Patent
 LA English
 IC ICM A61K031-557
 ICS A61K031-5377
 NCL 514573000; 514235800
 CC 1-12 (Pharmacology)
 Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | US 2004082660 | A1 | 20040429 | US 2003-429677 | 20030506 |
| | WO 2004037267 | A1 | 20040506 | WO 2003-JP13452 | 20031022 |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | US 2002-420776P | P | 20021024 | | |
| | US 2002-421044P | P | 20021025 | | |
| | US 2003-429677 | A | 20030506 | | |

CLASS

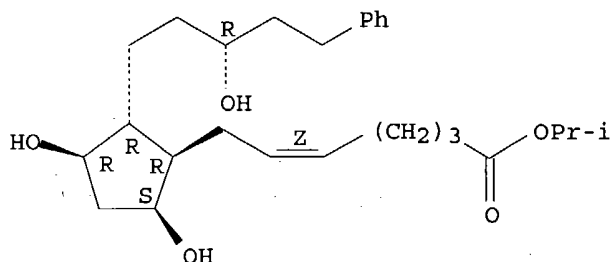
| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|--|-------|------------------------------------|
| | US 2004082660 | ICM | A61K031-557 |
| | | ICS | A61K031-5377 |
| | | NCL | 514573000; 514235800 |
| AB | A method is provided for treating ocular hypertension and glaucoma with reduced side effects such as keratoconjunctive disorders and macular edema, which comprises administering an ophthalmic composition comprising latanoprost as an active ingredient thereof to a subject in need of such treatment, wherein the ophthalmic composition contains substantially no benzalkonium chloride. | | |
| ST | latanoprost ocular hypertension glaucoma treatment | | |
| IT | Quaternary ammonium compounds, biological studies | | |
| | RL: BSU (Biological study, unclassified); BIOL (Biological study) (alkylbenzyl dimethyl, chlorides; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Eye, disease (keratoconjunctive disorders; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Antiglaucoma agents | | |
| | Glaucoma (disease) (latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Eye, disease (macular edema; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Drug delivery systems (ophthalmic; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Drug delivery systems (solns., ophthalmic ; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | Drug delivery systems (unit doses; latanoprost for treatment of ocular hypertension and glaucoma) | | |
| IT | 60-00-4, EDTA, biological studies 9005-65-6, Polysorbate 80 | | |

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dissolving agent; **latanoprost** for treatment of
ocular hypertension and glaucoma)
 IT 26839-75-8, Timolol **130209-82-4, Latanoprost**
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (**latanoprost** for treatment of **ocular** hypertension
 and glaucoma)
 IT **9005-65-6**, Polysorbate 80
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dissolving agent; **latanoprost** for treatment of
ocular hypertension and glaucoma)
 RN 9005-65-6 HCAPLUS
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **130209-82-4, Latanoprost**
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (**latanoprost** for treatment of **ocular** hypertension
 and glaucoma)
 RN 130209-82-4 HCAPLUS
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-
 phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L116 ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:331585 HCAPLUS

DN 140:344877

ED Entered STN: 23 Apr 2004

TI **Ophthalmic** solution comprising a prostaglandin compound and a
viscosity-increasing compound

IN **Ueno, Ryuji**

PA **Sucampo Ag, USA**

SO U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-557

ICS A61K009-14

NCL 424486000; 424488000; 514573000

CC 63-5 (Pharmaceuticals)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|--------------|
| PI | US 2004076678 | A1 | 20040422 | US 2003-644870 | 20030821 <-- |

PRAI US 2002-404779P P 20020821 <--
CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

US 2004076678 ICM A61K031-557
ICS A61K009-14
NCL 424486000; 424488000; 514573000

OS MARPAT 140:344877

AB The present invention relates to an **ophthalmic** solution comprising a prostaglandin compound and **viscosity**-increasing compd selected from the group consisting of acrylate polymers, polyvinyl alcs., glycerins, cellulose polymers and poly-lactams. The **ophthalmic** solution of the invention can provide elongated duration of the effect when administrated topically to the **eyes** of a patient.

ST ophthalmic soln prostaglandin **viscosity** increasing compd

IT **Prostaglandins**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(20-Et, 13,14-dihydro,15-keto; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT **Acrylic polymers, biological studies**

Prostaglandins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT **Lactams**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**polylactams**; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT Drug delivery systems

(solns., **ophthalmic**; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT 56-81-5, Glycerin, biological studies 9002-89-5

9004-34-6, Cellulose, biological studies 9005-63-4D,
fatty acyl derivs. 9005-65-6, Polysorbate 80 120373-24-2
120373-36-6 130209-82-4 163075-10-3
369585-22-8 607351-44-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

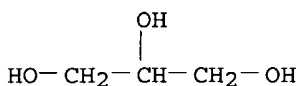
IT 56-81-5, Glycerin, biological studies 9002-89-5

9004-34-6, Cellulose, biological studies 9005-63-4D,
fatty acyl derivs. 9005-65-6, Polysorbate 80 120373-24-2
120373-36-6 130209-82-4 163075-10-3
369585-22-8 607351-44-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



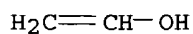
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9004-34-6 HCAPLUS
CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-63-4 HCAPLUS
CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

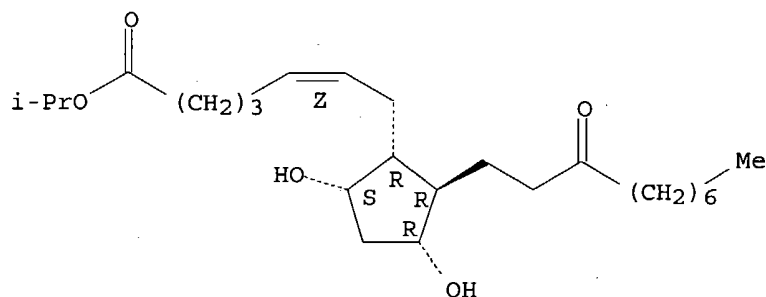
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-65-6 HCAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

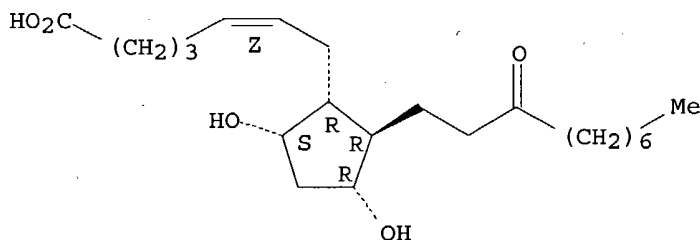
RN 120373-24-2 HCAPLUS
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



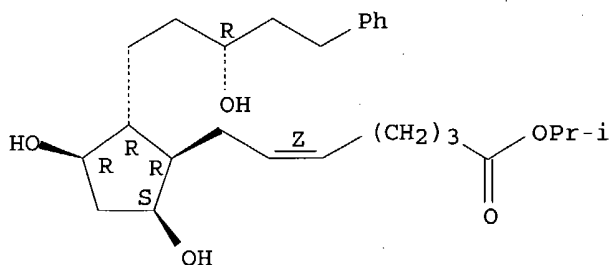
RN 120373-36-6 HCAPLUS
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 130209-82-4 HCAPLUS
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

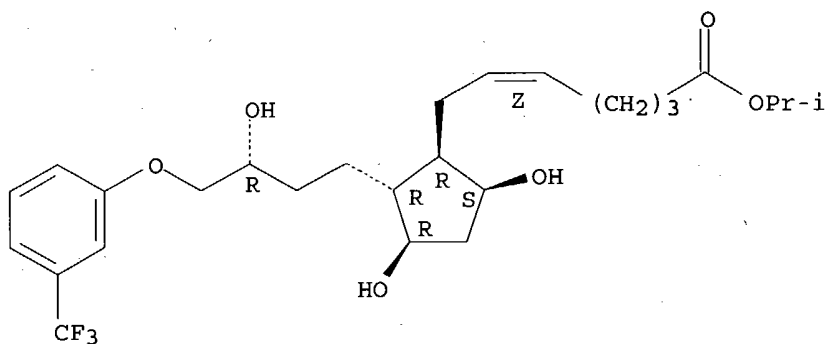


RN 163075-10-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, (5Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

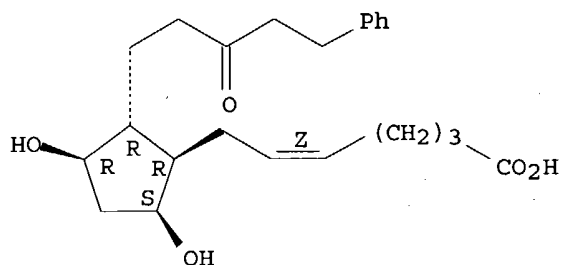


RN 369585-22-8 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, (5Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

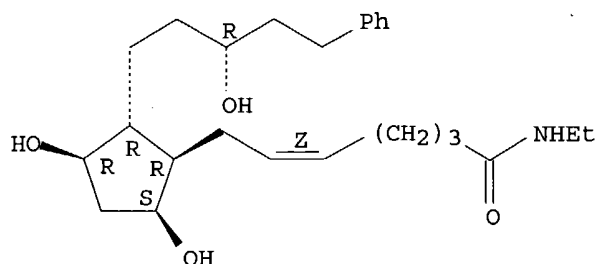


RN 607351-44-0 HCAPLUS

CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-N-ethyl-, (5Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L116 ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:220208 HCAPLUS

DN 140:259120

ED Entered STN: 19 Mar 2004

TI Transparent eye drops containing latanoprost

IN Asada, Hiroyuki; Kimura, Akio

PA Santen Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5575

ICS A61K009-08; A61K047-18; A61K047-34; A61K047-10; A61K047-26;

A61P027-06

CC 63-6 (Pharmaceuticals)

FAN.CNT.1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2004022063 | A1 | 20040318 | WO 2003-JP11402 | 20030908 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | JP 2004123729 | A2 | 20040422 | JP 2003-314865 | 20030908 |
| PRAI | JP 2002-263030 | A | 20020909 | | |
| | JP 2002-263035 | A | 20020909 | | |
| | JP 2002-263039 | A | 20020909 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|---|
| WO 2004022063 | ICM | A61K031-5575 |
| | ICS | A61K009-08; A61K047-18; A61K047-34; A61K047-10; A61K047-26; A61P027-06 |
| JP 2004123729 | FTERM | 4C076/AA12; 4C076/BB24; 4C076/CC10; 4C076/DD07E; 4C076/DD22Z; 4C076/DD23D; 4C076/DD26Z; 4C076/DD30Z; 4C076/DD38D; 4C076/DD49R; 4C076/DD67D; 4C076/EE23D; 4C076/FF11; 4C076/FF14; 4C076/FF15; 4C076/FF36; 4C076/FF39; 4C086/AA01; 4C086/AA02; 4C086/DA02; 4C086/MA03; 4C086/MA05; 4C086/MA17; 4C086/MA58; 4C086/NA03; 4C086/NA14; 4C086/ZA33; 4C086/ZC42 |

AB It is intended to provide an improved formulation of **latanoprost** eye drops. Namely, transparent eye drops contain

latanoprost as the active ingredient and benzalkonium chloride as a preservative, wherein clouding due to a composition change is prevented by using at least one means selected from the following means; (1) a means of adding a surfactant; (2) a means of using benzalkonium chloride represented by the formula $[C_6H_5CH_2N(CH_3)_2R]Cl$ (wherein R represents C12 alkyl) as the benzalkonium chloride; and (3) a means of adding a nonionic isotonic agent as an isotonic agent. For example, an **eye drop** solution contained **latanoprost** 0.005, NaH_2PO_4 0.2, $NaCl$ 0.8, polysorbate-80 0.01, benzalkonium chloride 0.01, and distilled water balance to 100 g.

- ST **eyedrop latanoprost** benzalkonium chloride polysorbate
 IT Quaternary ammonium compounds, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylbenzyltrimethyl, chlorides; transparent **eye drops** containing **latanoprost**)
- IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxylated; transparent **eye drops** containing **latanoprost**)
- IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogenated, ethoxylated; transparent **eye drops** containing **latanoprost**)
- IT Drug delivery systems
 (solns., **ophthalmic**; transparent **eye drops** containing **latanoprost**)
- IT Surfactants
 (transparent **eye drops** containing **latanoprost**)
- IT Polyoxyalkylenes, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (transparent **eye drops** containing **latanoprost**)
- IT 56-81-5, Glycerin, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 69-65-8, D-Mannitol 99-20-7, Trehalose 139-07-1, Dimethylbenzyldecylammonium chloride 9004-99-3, Polyethylene glycol monostearate 9005-65-6, Polysorbate 80 25322-68-3, Polyethylene glycol 130209-82-4, **Latanoprost**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (transparent **eye drops** containing **latanoprost**)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

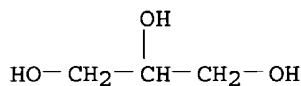
- (1) Alcon Laboratories Inc; CA 2112027 A 1994 HCAPLUS
 - (2) Alcon Laboratories Inc; US 5565492 A 1994 HCAPLUS
 - (3) Alcon Laboratories Inc; EP 603800 A1 1994 HCAPLUS
 - (4) Alcon Laboratories Inc; AU 9352450 A 1994 HCAPLUS
 - (5) Alcon Laboratories Inc; US 6166073 A 1997 HCAPLUS
 - (6) Alcon Laboratories Inc; AU 9676800 A 1997 HCAPLUS
 - (7) Alcon Laboratories Inc; WO 9723225 A1 1997 HCAPLUS
 - (8) Merk & Co Inc; US 20020094981 A1 1998
 - (9) Merk & Co Inc; JP 2002501533 A 1998
 - (10) Merk & Co Inc; WO 9853809 A1 1998 HCAPLUS
 - (11) Merk & Co Inc; AU 9876943 A 1998 HCAPLUS
 - (12) Merk & Co Inc; EP 998277 A1 1998 HCAPLUS
 - (13) Merk & Co Inc; WO 0004898 A1 2000 HCAPLUS
 - (14) Merk & Co Inc; EP 1109546 A1 2000 HCAPLUS
 - (15) Merk & Co Inc; JP 2002521332 A 2000
 - (16) Merk & Co Inc; AU 9950011 A 2000 HCAPLUS
 - (17) Sankyo Co Ltd; JP 62-277323 A 1987 HCAPLUS
 - (18) Santen Pharmaceutical Co Ltd; JP 46-26986 B 1971 HCAPLUS
 - (19) Santen Pharmaceutical Co Ltd; JP 01-246227 A 1989 HCAPLUS
 - (20) Santen Pharmaceutical Co Ltd; WO 03063879 A1 2003 HCAPLUS
 - (21) Santen Pharmaceutical Co Ltd; JP 2003292442 A 2003 HCAPLUS
- IT 56-81-5, Glycerin, biological studies 9005-65-6,

Polysorbate 80 130209-82-4, Latanoprost

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transparent eye drops containing latanoprost)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



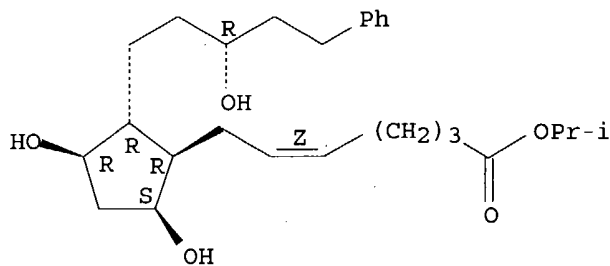
RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L116 ANSWER 4 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:162759 HCAPLUS

DN 140:187439

ED Entered STN: 29 Feb 2004

TI Coated polyunsaturated fatty acid-containing particles for liquid
pharmaceuticals

IN Dalziel, Sean Mark; Friedmann, Thomas E.; Schurr, George A.

PA E.I. Du Pont de Nemours and Company, USA

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C10M

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|--------------|
| PI | WO 2004016720 | A2 | 20040226 | WO 2003-US25873 | 20030814 <-- |
| | WO 2004016720 | A3 | 20040408 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, | | | | |

TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-403598P P 20020814 <--

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2004016720 ICM C10M

AB A process for coating a polyunsatd. fatty acid (PUFA)-containing carrier particle or a PUFA matrix particle, or a liquid pharmaceutical-containing carrier particle or a liquid pharmaceutical matrix particle. Also disclosed are such particles made by the process of the invention and foods, pharmaceuticals, beverages, nutritional supplements, infant formula, pet food and animal feed which incorporate such particles. The oil-coated silica particles were coated to produce a barrier layer of solid gelatin. Such a solid coating on an oil materials is useful as a barrier to the undesirable effects of oxidation and it improves the handling characteristics of of the oil-coated particles.

ST coated polyunsatd fatty acid liq pharmaceutical

IT Hormone replacement therapy
 (agents for; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Diagnosis
 (agents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Hormones, animal, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anabolic steroids; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Thyroid gland
 (antithyroid agents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Heart, disease
 (arrhythmia; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Skin preparations (pharmaceutical)
 (astringents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Drug delivery systems
 (buccal; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Ion channel blockers
 (calcium; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Glycosides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cardiac; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Adrenoceptor agonists
 Adrenoceptor antagonists
 Analgesics
 Antacids
 Anthelmintics
 Anti-inflammatory agents
 Antiarrhythmics
 Antibiotics
 Anticoagulants
 Anticonvulsants
 Antidepressants
 Antidiabetic agents

Antidiarrheals
Antiemetics
Antihistamines
Antihypertensives
Antiobesity agents
Antioxidants
Antipsychotics
Antitumor agents
Antitussives
Antiviral agents
Anxiety
Anxiolytics
Asthma
Beverages
Binders
Bitterness
Bronchodilators
Cholinergic agonists
Cholinergic antagonists
Coating materials
Contraceptives
Convulsion
Cough
Diabetes mellitus
Diarrhea
Diuresis
Diuretics
Dopamine agonists
Dyes
Electrolytes
Epilepsy
Feed
Flavoring materials
Food
Fungicides
Hemorrhage
Hemostatics
Human
Hydrocolloids
Hypertension
Hypnotics and Sedatives
Immunosuppressants
Immunosuppression
Inflammation
Laxatives
Lubricants
Muscarinic antagonists
Muscle relaxants
Mycosis
Neoplasm
Nervous system stimulants
Obesity
Odor and Odorous substances
Pain
Protozoacides
Psychostimulants
Sleep
Surfactants
Thrombosis
Thyroid gland, disease
Vaccines
Vasodilation
Vasodilators

- Vomiting
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT **Acrylic polymers, biological studies**
Alditols
Antibodies and Immunoglobulins
Bile acids
Carbohydrates, biological studies
Corticosteroids, biological studies
Disaccharides
Enzymes, biological studies
Lipids, biological studies
Minerals, biological studies
Monosaccharides
Oligosaccharides, biological studies
Peptides, biological studies
Polymers, biological studies
Polyoxyalkylenes, biological studies
Polysaccharides, biological studies
Prostaglandins
Proteins
Salts, biological studies
Sex hormones
Shellac
Sulfonamides
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Intestine, disease
(constipation; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Mental disorder
(depression; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Waxes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(emulsifying; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycolide-based; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Milk substitutes
(human; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Drug delivery systems
(implants; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Sexual behavior
(impotence, drugs for treatment of; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Animal virus
Protozoa
(infection with; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Drug delivery systems
(inhalants; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lactic acid-based; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lactide; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(liqs.; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(nasal; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(ophthalmic; coated polyunsatd. fatty acid-containing particles
for liquid pharmaceuticals)

IT Drug delivery systems
(oral; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(parenterals; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyhydric; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd.; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Intestinal bacteria
(probiotic; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Mental disorder
(psychosis; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(rectal; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(soybean; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Muscle, disease
(spasm; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Muscle relaxants
(spasmolytics; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(sublingual; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Diet
(supplements; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(topical; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(transdermal; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Drug delivery systems
(vaginal; coated polyunsatd. fatty acid-containing particles for liquid
pharmaceuticals)

IT Adrenoceptor antagonists
(β -; coated polyunsatd. fatty acid-containing particles for liquid

pharmaceuticals)

IT 57-11-4, Stearic acid, biological studies 57-50-1, Sucrose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 69-89-6D, Xanthine, derivs. 77-93-0, Triethyl citrate 79-41-4D, Methacrylic acid, esters, polymers 102-76-1, Triacetin 109-43-3, Dibutyl sebacate 151-21-3, Sodium lauryl sulfate, biological studies 471-34-1, Calcium carbonate, biological studies 506-26-3, γ -Linolenic acid 506-32-1, Arachidonic acid 557-04-0 577-11-7, Sodium docusate 1783-84-2, Dihomo γ -Linolenic acid 4070-80-8, Sodium stearyl fumarate 7757-93-9, Dicalcium phosphate 9002-88-4, Polyethylene 9003-39-8, Polyvinylpyrrolidone 9004-34-6D, Cellulose, derivs. 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9005-65-6, Tween 80 9063-38-1, Sodium starch glycolate 13463-67-7, Titanium oxide, biological studies 14807-96-6, Talc, biological studies 25167-62-8, Docosahexaenoic acid 25322-68-3, Polyethylene glycol 25378-27-2, Eicosapentaenoic acid 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26202-08-4, Polyglycolide 26680-10-4, Polylactide 74811-65-7, Croscarmellose sodium 105287-09-0, Aquateric 106392-12-5, Poloxamer

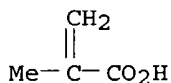
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT 7631-86-9, Fumed silica, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(colloidal; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT 79-41-4D, Methacrylic acid, esters, polymers 9004-34-6D, Cellulose, derivs. 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-65-6, Tween 80
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



RN 9004-34-6 HCAPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-38-0 HCAPLUS

CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

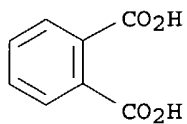
CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

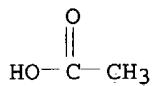
CM 2

CRN 88-99-3
CMF C8 H6 O4



CM 3

CRN 64-19-7
CMF C2 H4 O2



RN 9004-57-3 HCAPLUS
CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

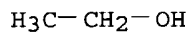
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5
CMF C2 H6 O



RN 9004-64-2 HCAPLUS
CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

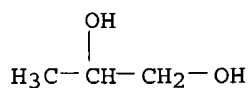
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
CMF C3 H8 O2



RN 9004-65-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

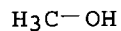
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

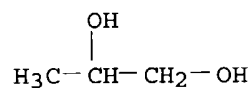
CM 2

CRN 67-56-1
CMF C H4 O



CM 3

CRN 57-55-6
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

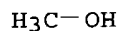
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O



RN 9005-65-6 HCAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:60341 HCAPLUS

DN 140:117406

ED Entered STN: 26 Jan 2004

TI Liquid dosage compositions of stable nanoparticulate drugs

IN Bosch, William H.; Hilborn, Matthew R.; Hovey, Douglas C.; Kline, Laura J.; Lee, Robert W.; Pruitt, John D.; Ryde, Niels P.; Ryde, Tuula A.; Xu, Shuqian

PA Elan Pharma International, Ltd, Ire.

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-02

ICS A61K047-10; A61K047-26; A61K009-10; A61K009-14; A61K031-192; A61K031-58

CC 63-6 (Pharmaceuticals)

FAN.CNT 15

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|--------------|-----------------|--------------|
| PI | WO 2004006959 | A1 | 20040122 | WO 2003-US22187 | 20030716 <-- |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2002-396530P | P | 20020716 <-- | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|---|
| WO 2004006959 | ICM | A61K047-02 |
| | ICS | A61K047-10; A61K047-26; A61K009-10; A61K009-14; A61K031-192; A61K031-58 |

AB The present invention relates to liquid dosage compns. of stable nanoparticulate drugs. The liquid dosage compns. of the invention include osmotically active crystal growth inhibitors that stabilize the nanoparticulate active agents against crystal and particle size growth of the drug. Thus, an aqueous nanoparticulate colloidal dispersion (NCD) comprising drug 32.5 Copovidone 6.5, and dioctyl sodium sulfosuccinate 0.464% by weight was prepared by milling for 3.8 h under high energy milling conditions. The final mean particle size (by weight) of the drug particles was 161 nm. The concentrated NCD was then diluted with preserved water and glycerol (the osmotically active crystal growth inhibitor) to 0.5-3.0% drug.

ST liq dosage stable nanoparticulate drug

IT Intestine, disease

(Crohn's; liquid dosage compns. of stable nanoparticulate drugs)

IT Alcohols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C16-18, ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Alcohols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C16-18; liquid dosage compns. of stable nanoparticulate drugs)

IT Arthritis

(Reiter's syndrome; liquid dosage compns. of stable nanoparticulate

drugs)

IT Drug delivery systems
(aerosols; liquid dosage compns. of stable nanoparticulate drugs)

IT Diagnosis
(agents; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkyl group-terminated; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkylbenzyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkyltrimethyl, ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(animal, marine; liquid dosage compns. of stable nanoparticulate drugs)

IT Spinal column, disease
(ankylosing spondylitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyethers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aromatic, sulfonates; liquid dosage compns. of stable nanoparticulate drugs)

IT Heart, disease
(arrhythmia; liquid dosage compns. of stable nanoparticulate drugs)

IT Skin preparations (pharmaceutical)
(astringents; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzyl-C12-18-alkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzyl-C14-18-alkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(bioadhesive; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(buccal; liquid dosage compns. of stable nanoparticulate drugs)

IT Joint, anatomical
(bursa, disease, bursitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(capsules; liquid dosage compns. of stable nanoparticulate drugs)

IT Lipids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cationic; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, neoplasm
(cervix; liquid dosage compns. of stable nanoparticulate drugs)

IT Bronchi, disease
(chronic bronchitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Lung, disease
(chronic obstructive; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coco alkyl(hydroxyethyl)dimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coco alkylbis(hydroxyethyl)methyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coco alkyltrimethyl, bromides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coco alkyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coco, esters with sucrose; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestine, disease
(colitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Imaging agents
(contrast; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(controlled-release; liquid dosage compns. of stable nanoparticulate drugs)

IT Mental disorder
(depression; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dialkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Tendon
(disease, tendinitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, disease
(endometriosis; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, neoplasm
(endometrium; liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters; liquid dosage compns. of stable nanoparticulate drugs)

IT Castor oil
Phospholipids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(evening primrose; liquid dosage compns. of stable nanoparticulate drugs)

IT Fruit
Vegetable
(exts.; liquid dosage compns. of stable nanoparticulate drugs)

IT Heart, disease
(failure; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestine, neoplasm
(familial polyposis; liquid dosage compns. of stable nanoparticulate drugs)

IT Muscle, disease
(fibromyalgia; liquid dosage compns. of stable nanoparticulate drugs)

IT Stomach, disease
(gastritis; liquid dosage compns. of stable nanoparticulate drugs)

IT Digestive tract, disease

(gastroenteritis; liquid dosage compns. of stable nanoparticulate drugs)
IT Drug delivery systems
 (gels; liquid dosage compns. of stable nanoparticulate drugs)
IT Tea products
 (green; liquid dosage compns. of stable nanoparticulate drugs)
IT Carboxylic acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydroxy; liquid dosage compns. of stable nanoparticulate drugs)
IT Animal virus
 Eubacteria
 Fungi
 (infection with; liquid dosage compns. of stable nanoparticulate drugs)
IT Lung, disease
 (infection; liquid dosage compns. of stable nanoparticulate drugs)
IT Intestine, disease
 (inflammatory; liquid dosage compns. of stable nanoparticulate drugs)
IT Crystal growth
 Thyroid gland
 (inhibitors; liquid dosage compns. of stable nanoparticulate drugs)
IT Drug delivery systems
 (injections, i.p.; liquid dosage compns. of stable nanoparticulate drugs)
IT Rheumatoid arthritis
 (juvenile; liquid dosage compns. of stable nanoparticulate drugs)
IT AIDS (disease)
 Acne
 Adrenoceptor agonists
 Allergy
 Allergy inhibitors
 Aloe barbadensis
 Alzheimer's disease
 Analgesics
 Anorexia
 Anthelmintics
 Anti-AIDS agents
 Anti-Alzheimer's agents
 Anti-inflammatory agents
 Antiarrhythmics
 Antiarthritics
 Antiasthmatics
 Antibacterial agents
 Antibiotics
 Anticoagulants
 Anticonvulsants
 Antidepressants
 Antidiabetic agents
 Antiemetics
 Antihistamines
 Antihypertensives
 Antimigraine agents
 Antiobesity agents
 Antioxidants
 Antirheumatic agents
 Antitumor agents
 Antitussives
 Antiviral agents
 Anxiety
 Anxiolytics
 Arthritis
 Asthma
 Blood products
 Blood substitutes
 Cachexia
 Cardiovascular agents

Cardiovascular system, disease
Castration
Cholinergic agonists
Commiphora mukul
Cough
Cystic fibrosis
Diabetes mellitus
Diuresis
Diuretics
Dopamine agonists
Drug bioavailability
Drug bioequivalence
Dysmenorrhea
Dyspepsia
Emphysema
Epilepsy
Fish
Food
Food additives
Food poisoning
Fungicides
Gout
Hemorrhage
Hemostatics
Herb
Hirsutism
Hormone replacement therapy
Human
Hypertension
Hypnotics and Sedatives
Imaging agents
Immunosuppressants
Immunosuppression
Inflammation
Inotropics
Kidney, disease
Kidney, neoplasm
Mammary gland, neoplasm
Motion sickness
Muscarinic antagonists
Muscle contraction
Muscle relaxants
Neoplasm
Obesity
Osteoarthritis
Osteoporosis
Pain
Parathyroid gland
Particle size distribution
Prostate gland, neoplasm
Radiopharmaceuticals
Respiratory distress syndrome
Rheumatoid arthritis
Shear
Size reduction
Sleep
Solubility
Stabilizing agents
Storage
Thrombosis
Transplant and Transplantation
Transplant rejection
Uterus, neoplasm

Vasodilation

Vasodilators

Viscosity

Vomiting

(liquid dosage compns. of stable nanoparticulate drugs)

IT Glycols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Alditols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amine oxides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amines, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amino acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Biopolymers

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Carbohydrates, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Caseins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Corticosteroids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Disaccharides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Flavonoids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Gelatins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Glycerophospholipids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Minerals, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Monosaccharides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Peptides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphates, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphatidylserines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphonium compounds
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT **Prostaglandins**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Safflower oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Salts, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Sex hormones
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Sulfonium compounds
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(liqs.; liquid dosage compns. of stable nanoparticulate drugs)

IT Headache
(migraine; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(nanoparticles; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(nasal; liquid dosage compns. of stable nanoparticulate drugs)

IT Anti-inflammatory agents
(nonsteroidal; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(ointments, creams; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(ointments; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(ophthalmic; liquid dosage compns. of stable nanoparticulate drugs)

IT Contraceptives
Drug delivery systems
(oral; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(parenterals; liquid dosage compns. of stable nanoparticulate drugs)

IT Nerve, disease

(peripheral, injury; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(phenolic; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phospholipid derivs.; liquid dosage compns. of stable nanoparticulate drugs)

IT Nutrients
(plant; liquid dosage compns. of stable nanoparticulate drugs)

IT Phenolic resins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(polyoxyalkylene-; liquid dosage compns. of stable nanoparticulate drugs)

IT Menopause
(postmenopause; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestinal bacteria
(probiotic; liquid dosage compns. of stable nanoparticulate drugs)

IT Arthritis
(psoriatic arthritis; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(pulmonary; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(rectal; liquid dosage compns. of stable nanoparticulate drugs)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(regulating agents; liquid dosage compns. of stable nanoparticulate drugs)

IT Amines, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts; liquid dosage compns. of stable nanoparticulate drugs)

IT Connective tissue, disease
(scleroderma; liquid dosage compns. of stable nanoparticulate drugs)

IT Linum usitatissimum
(seeds; liquid dosage compns. of stable nanoparticulate drugs)

IT Diet
(supplements; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(suspensions, oral; liquid dosage compns. of stable nanoparticulate drugs)

IT Lupus erythematosus
(systemic; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(tablets; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(topical; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tri-C8-10-alkylmethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems
(vaginal; liquid dosage compns. of stable nanoparticulate drugs)

IT Adrenoceptor antagonists
(β -; liquid dosage compns. of stable nanoparticulate drugs)

IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bisphosphonate; liquid dosage compns. of stable nanoparticulate drugs)

IT 7631-86-9, Silica, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(colloidal; liquid dosage compns. of stable nanoparticulate drugs)

IT 9004-06-2, Elastase 329900-75-6, COX-2
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; liquid dosage compns. of stable nanoparticulate drugs)

IT 110-54-3, Hexane, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (liquid dosage compns. of stable nanoparticulate drugs)

IT 50-35-1, Thalidomide 50-44-2, Mercaptopurine 50-53-3, Chlorpromazine,
 biological studies 50-78-2, Acetylsalicylic acid 50-99-7, Glucose,
 biological studies 52-53-9, Verapamil 56-81-5, Glycerol,
 biological studies 56-85-9, Glutamine, biological studies 57-09-0,
 Hexadecyltrimethylammonium bromide 57-11-4, Stearic acid, biological
 studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose,
 biological studies 57-55-6, Propylene glycol, biological studies
 57-88-5, Cholesterol, biological studies 58-32-2, Dipyrindamole
 59-30-3, Folic acid, biological studies 62-49-7D, Choline, esters
 63-42-3, Lactose 64-17-5, Ethanol, biological studies 67-45-8,
 Furazolidone 69-65-8, Mannitol 69-89-6D, Xanthine, derivs. 73-31-4,
 Melatonin 75-65-0, biological studies 80-74-0, Acetylsulfisoxazole
 87-99-0, Xylitol 99-20-7, Trehalose 102-71-6, Triethanolamine,
 biological studies 110-86-1D, Pyridine, quaternized, salts 112-00-5,
 Lauryltrimethylammonium chloride 123-03-5, CPC 129-03-3,
 Cyproheptadine 132-17-2, Benztropine mesylate 134-32-7D,
 1-Naphthylamine, alkyldimethylammonium salts 139-07-1,
 Lauryldimethylbenzylammonium chloride 140-72-7, Cetylpyridinium bromide
 143-67-9, Vinblastine sulfate 148-79-8, Thiabendazole 151-21-3, SDS,
 biological studies 154-42-7, Thioguanine 288-32-4D, Imidazole,
 quaternized, salts 303-53-7, Cyclobenzaprine 396-01-0, Triamterene
 500-92-5, Proguanil 502-65-8, Lycopene 645-05-6, Altretamine
 846-50-4, Temazepam 1119-94-4, Dodecyltrimethylammonium bromide
 1119-97-7, Tetradecyltrimethylammonium bromide 1200-22-2, Lipoic acid
 1327-43-1, Magnesium aluminum silicate 1592-23-0, Calcium Stearate
 1643-19-2, Tetrabutylammonium bromide 1951-25-3, Amiodarone 1977-10-2,
 Loxapine 2062-78-4, Pimozide 2082-84-0, Decyltrimethylammonium bromide
 2609-46-3, Amiloride 3416-24-8, Glucosamine 3458-28-4, Mannose
 4205-90-7, Clonidine 4342-03-4, Dacarbazine 5137-55-3,
 Methyltriethylammonium chloride 5350-41-4, Benzyltrimethylammonium
 bromide 7173-51-5, Dimethyldidecylammonium chloride 7281-04-1,
 Lauryldimethylbenzylammonium bromide 7447-40-7, Potassium chloride
 (KCl), biological studies 7647-14-5, Sodium chloride, biological studies
 7786-30-3, Magnesium chloride (MgCl₂), biological studies 9000-01-5, Gum
 acacia 9000-30-0D, Guar gum, cationic derivs. 9000-65-1, Tragacanth
 gum 9001-63-2, Lysozyme 9002-89-5, Poly(vinyl alcohol)
 9003-39-8, Polyvinylpyrrolidone 9004-32-4 9004-34-6,
 Cellulose, biological studies 9004-54-0, Dextran, biological studies
 9004-62-0, Hydroxyethyl cellulose 9004-64-2,
 Hydroxypropyl cellulose 9004-65-3, Hypromellose
 9004-67-5, Methyl cellulose 9004-99-3, Polyethylene glycol
 stearate 9005-32-7, Alginic acid 9007-12-9, Calcitonin 9007-27-6,
 Chondroitin 9011-14-7, Poly(methyl methacrylate) 9011-14-7D,
 Poly(methyl methacrylate), hydrolyzed, trimethylammonium salts
 9050-04-8, Cellulose, carboxymethyl ether, calcium salt
 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10118-90-8,
 Minocycline 12441-09-7D, Sorbitan, esters 13292-46-1, Rifampin
 16679-58-6, Desmopressin 18186-71-5, Dodecyltriethylammonium bromide
 24280-93-1 25086-89-9, Vinyl acetate-1-vinyl-2-pyrrolidone copolymer
 25301-02-4, Ethylene oxide-formaldehyde-4-(1,1,3,3-Tetramethylbutyl)phenol
 copolymer 25322-68-3, Polyethylene glycol 25322-68-3D, Polyethylene
 glycol, phospholipid derivs. 26062-79-3, Poly(diallyldimethylammonium
 chloride) 27195-16-0, Sucrose distearate 27321-96-6, Polyethylene
 glycol cholesteryl ether 28228-56-0 28679-24-5,
 Dodecylbenzyltriethylammonium chloride 28981-97-7, Alprazolam
 29094-61-9, Glipizide 29767-20-2, Teniposide 29836-26-8,

n-Octyl-β-D-glucopyranoside 31431-39-7, Mebendazole 31566-31-1,
 Glyceryl monostearate 33419-42-0, Etoposide 34911-55-2, Bupropion
 36735-22-5, Quazepam 37318-31-3, Sucrose stearate 38443-60-6,
 Decyltriethylammonium chloride 39809-25-1, Penciclovir 42399-41-7,
 Diltiazem 51264-14-3, Amsacrine 51569-39-2, Olin 10G 52128-35-5,
 Trimetrexate 52467-63-7, Tricetylmethylammonium chloride 55008-57-6
 55268-75-2, Cefuroxime 55348-40-8, Triton X-200 58846-77-8, n-Decyl
 β-D-glucopyranoside 59080-45-4, n-Hexyl β-D-glucopyranoside
 59122-55-3, n-DoDecyl β-D-glucopyranoside 59277-89-3, Acyclovir
 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 66085-59-4,
 Nimodipine 69227-93-6, n-DoDecyl β-D-maltoside 69984-73-2,
 n-Nonyl β-D-glucopyranoside 70458-96-7, Norfloxacin 72509-76-3,
 Felodipine 72558-82-8, Ceftazidime 72559-06-9, Rifabutin 73590-58-6,
 Omeprazole 76095-16-4, Enalapril maleate 76420-72-9, Enalaprilat
 76824-35-6, Famotidine 78617-12-6, n-Heptyl β-D-glucopyranoside
 79617-96-2, Sertraline 79794-75-5, Loratadine 81098-60-4, Cisapride
 81103-11-9, Clarithromycin 81409-90-7, Cabergoline 81859-24-7,
 Polyquat 10 82494-09-5, n-Decyl β-D-maltoside 84449-90-1,
 Raloxifene 85261-19-4, Nonanoyl-N-methylglucamide 85261-20-7,
 Decanoyl-N-methylglucamide 85316-98-9 85618-20-8, n-Heptyl
 β-D-thiogluconopyranoside 85618-21-9, n-Octyl-β-D-
 thiogluconopyranoside 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole
 87679-37-6, Trandolapril 91161-71-6, Terbinafine 95233-18-4,
 Atovaquone 97322-87-7, Troglitazone 100286-97-3, Milrinone lactate
 101397-87-9, D-Glucitol, 1-deoxy-1-[methyl(1-oxoheptyl)amino]-
 103577-45-3, Lansoprazole 104987-11-3, Tacrolimus 106266-06-2,
 Risperidone 106392-12-5, Pluronic 107397-59-1, Tetronic 150R8
 110617-70-4, Poloxamine 113665-84-2, Clopidogrel 115956-12-2,
 Dolasetron 127666-00-6 127779-20-8, Saquinavir 132539-06-1,
 Olanzapine 136817-59-9, Delavirdine 138402-11-6, Irbesartan
 139481-59-7, Candesartan 139755-83-2, Sildenafil 144034-80-0,
 Rizatriptan 145599-86-6, Cerivastatin 147059-72-1, Trovafloxacin
 159989-65-8, Nelfinavir mesylate 283158-20-3 329326-68-3,
 p-Isononylphenoxypolyglycidol 503178-50-5 608094-65-1, PEG-vitamin A
 630400-66-7 630400-67-8 634601-99-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (liquid dosage compns. of stable nanoparticulate drugs)

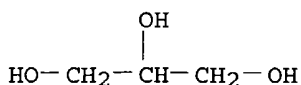
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Nanosystems Llc; WO 9624335 A 1996 HCAPLUS
 - (2) Rajagopalan, N; US 5298262 A 1994 HCAPLUS
 - (3) Ruddy, S; US 5585108 A 1996 HCAPLUS
 - (4) Sterling Winthrop Inc; EP 0601619 A 1994 HCAPLUS
- IT 56-81-5, Glycerol, biological studies 9002-89-5,
 Poly(vinyl alcohol) 9004-32-4 9004-34-6, Cellulose,
 biological studies 9004-62-0, Hydroxyethyl cellulose
 9004-64-2, Hydroxypropyl cellulose 9004-65-3,
 Hypromellose 9004-67-5, Methyl cellulose 9050-04-8,
 Cellulose, carboxymethyl ether, calcium salt 9050-31-1,
 Hydroxypropyl methyl cellulose phthalate 81859-24-7, Polyquat 10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (liquid dosage compns. of stable nanoparticulate drugs)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



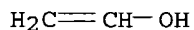
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

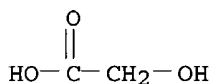
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 9004-34-6 HCAPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-62-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

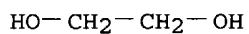
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1

CMF C2 H6 O2



RN 9004-64-2 HCAPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

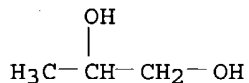
CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

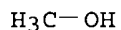
CRN 57-55-6
CMF C3 H8 O2RN 9004-65-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

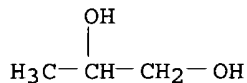
CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

CM 3

CRN 57-55-6
CMF C3 H8 O2RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

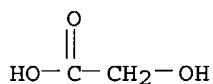
CRN 67-56-1
CMF C H4 O

H₃C-OH

RN 9050-04-8 HCAPLUS
CN Cellulose, carboxymethyl ether, calcium salt (9CI) (CA INDEX NAME)
CM 1
CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

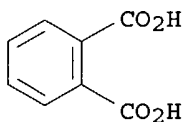
CM 2
CRN 79-14-1
CMF C2 H4 O3



RN 9050-31-1 HCAPLUS
CN Cellulose, hydrogen 1,2-benzenedicarboxylate, 2-hydroxypropyl methyl ether
(9CI) (CA INDEX NAME)
CM 1
CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2
CRN 88-99-3
CMF C8 H6 O4

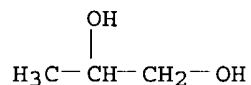


CM 3
CRN 67-56-1
CMF C H4 O

H₃C-OH

CM 4

CRN 57-55-6
CMF C3 H8 O2



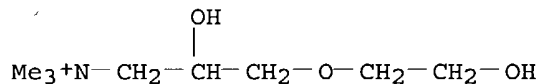
RN 81859-24-7 HCAPLUS
CN Cellulose, 2-hydroxyethyl 2-[2-hydroxy-3-(trimethylammonio)propoxy]ethyl
2-hydroxy-3-(trimethylammonio)propyl ether, chloride (9CI) (CA INDEX
NAME)

CM 1

CRN 170553-71-6
CMF C8 H20 N O3 . x C6 H16 N O2 . x C2 H6 O2 . x Unspecified

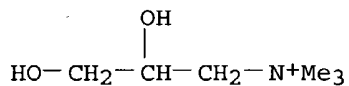
CM 2

CRN 170344-46-4
CMF C8 H20 N O3



CM 3

CRN 44814-66-6
CMF C6 H16 N O2



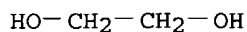
CM 4

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 107-21-1
CMF C2 H6 O2



AN 2003:609847 HCAPLUS
 DN 139:128062
 ED Entered STN: 08 Aug 2003
 TI Method of enhancing hair growth using cyclopentane heptanoic acid compounds
 IN Woodward, David F.; Vandenburg, Amanda M.
 PA Allergan, Inc., USA
 SO U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K031-557
 ICS A61K031-558; A61K007-06
 NCL 424070100; 514568000; 514430000; 514277000; 514449000
 CC 1-12 (Pharmacology)
 Section cross-reference(s): 63

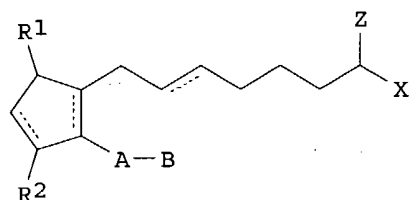
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|--------------|-----------------|--------------|
| PI | US 2003147823 | A1 | 20030807 | US 2003-345788 | 20030115 <-- |
| | WO 2003066008 | A1 | 20030814 | WO 2003-US3363 | 20030203 <-- |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2002-354425P | P | 20020204 <-- | | |
| | US 2003-345788 | A | 20030115 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|---|
| US 2003147823 | ICM | A61K031-557 |
| | ICS | A61K031-558; A61K007-06 |
| | NCL | 424070100; 514568000; 514430000; 514277000; 514449000 |

OS MARPAT 139:128062
 GI

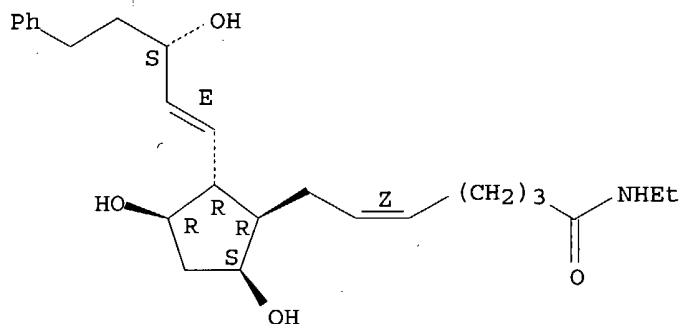


AB Methods and compns. for stimulating the growth of hair are disclosed wherein said compns. include a cyclopentane heptanoic acid, 2-cycloalkyl or arylalkyl compound I (dashed bonds represent single or double bond which can be in the cis or trans configuration; A = alkylene or alkenylene radical; B = cycloalkyl, aryl; Z = O; X = N(R4)2; R4 = H, lower alkyl, etc.; R1, R2 = O, OH, O(CO)R6; and R6 = C1-20 (un)saturated acyclic hydrocarbon, etc.). Such compns. are used in treating the skin or scalp

- of a human or non-human animal. Bimatoprost is preferred for this treatment. In a patient treated for glaucoma with bimatoprost, the **eyelashes** had increased growth.
- ST cyclopentane heptanoate compd enhancing hair growth; **eyelash** growth bimatoprost
- IT Drug delivery systems
(aerosols; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Alopecia
Animal
Hair
Human
Mammalia
Scalp
Skin
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Paraffin oils
Petrolatum
Wool wax
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT **Eye**
(**eyelash**; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Hair
(follicle; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Hair preparations
(growth stimulants; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems
(lotions; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems
(ointments, creams; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems
(powders, topical, dusting; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems
(solns.; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Waxes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(spermaceti; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems
(topical; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT 5763-58-6D, Cyclopentane heptanoic acid, cycloalkyl or arylalkyl compds. **155206-00-1**, Bimatoprost **155206-00-1D**, Bimatoprost, acid addition salts
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 75-71-8, Dichlorodifluoromethane 99-76-3, Methylparaben 872-50-4, N-Methyl pyrrolidone, biological studies 1314-13-2, Zinc oxide, biological studies 1320-37-2, Dichlorotetrafluoroethane 7732-18-5, Water, biological studies 8011-96-9, Calamine 8049-07-8, Tegacid **9005-65-6**, Polysorbate 80 14807-96-6, Talc, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclopentane heptanoic acid compds. for enhancing hair growth)

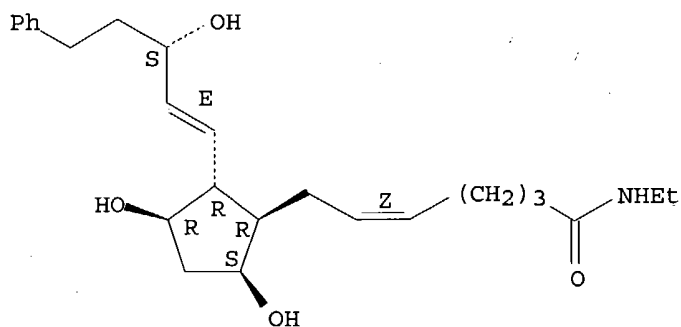
IT 155206-00-1, Bimatoprost 155206-00-1D, Bimatoprost, acid addition salts
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cyclopentane heptanoic acid compds. for enhancing hair growth)
 RN 155206-00-1 HCAPLUS
 CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-pentenyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 155206-00-1 HCAPLUS
 CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-pentenyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 9005-65-6, Polysorbate 80
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cyclopentane heptanoic acid compds. for enhancing hair growth)
 RN 9005-65-6 HCAPLUS
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:491033 HCAPLUS
 DN 139:47185
 ED Entered STN: 27 Jun 2003
 TI Aminoalkyl-benzofuran-5-ol compounds for the treatment of glaucoma
 IN May, Jesse A.
 PA Alcon, Inc., Switz.

SO PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-34
 ICS C07D307-81; C07D307-82
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|------|-----------------|------|--------------|--|--------------|--|
| PI | WO 2003051352 | A1 | 20030626 | WO 2002-US38908 | 20021205 <-- | |
| | W: | | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | |
| | RW: | | | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR | | |
| | EP 1461030 | A1 | 20040929 | EP 2002-784741 | 20021205 <-- | |
| | R: | | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | |
| PRAI | US 2001-340361P | P | 20011214 <-- | | | |
| | WO 2002-US38908 | W | 20021205 | | | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|---|-------|------------------------------------|
| | WO 2003051352 | ICM | A61K031-34 |
| | | ICS | C07D307-81; C07D307-82 |
| AB | The present invention provides novel compns. containing the compds. of the invention in a pharmaceutically acceptable excipient and methods for using the compns. for lowering intraocular pressure. | | |
| ST | aminoalkyl benzofuranol compd glaucoma intraocular pressure | | |
| IT | Glutamate antagonists (NMDA antagonists; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Viscosity (agents for; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Antiglaucoma agents Eye Surfactants (aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Prostaglandins RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Ion channel blockers (calcium; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Nervous system agents (miotics; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Cytoprotective agents (neuroprotective; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Drug delivery systems (solns., ophthalmic ; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Drug delivery systems (suspensions, ophthalmic ; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Adrenoceptor agonists ($\alpha 2$ -; aminoalkyl benzofuranol compds. for treatment of glaucoma) | | |
| IT | Adrenoceptor antagonists | | |

(β -; aminoalkyl benzofuranol compds. for treatment of glaucoma)
IT 9003-39-8, Polyvinylpyrrolidone 9004-62-0, Hydroxyethyl
cellulose 9004-65-3, Hydroxypropyl methyl cellulose
9004-67-5, Methyl cellulose 37353-59-6, Hydroxymethyl
cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aminoalkyl benzofuranol compds. for treatment of glaucoma)
IT 9001-03-0, Carbonic anhydrase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; aminoalkyl benzofuranol compds. for treatment of glaucoma)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Eli Lilly And Company; WO 0044737 A1 2000 HCAPLUS
(2) Grinev; CAPLUS NO 1984:68106 1983
(3) Ogawa; US 5539974 A1 1996
IT 9004-62-0, Hydroxyethyl cellulose 9004-65-3,
Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
37353-59-6, Hydroxymethyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aminoalkyl benzofuranol compds. for treatment of glaucoma)
RN 9004-62-0 HCAPLUS
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

RN 9004-65-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

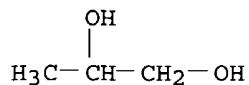
CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

CM 3

CRN 57-55-6
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

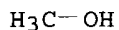
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O



RN 37353-59-6 HCAPLUS
CN Cellulose, hydroxymethyl ether (9CI) (CA INDEX NAME)

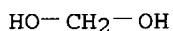
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 463-57-0
CMF C H4 O2



L116 ANSWER 8 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:490986 HCAPLUS

DN 139:63347

ED Entered STN: 27 Jun 2003

TI Substituted 5-hydroxyindole compounds for the treatment of
glaucoma

IN May, Jesse A.; Dantanarayana, Anura P.

PA Alcon, Inc., Switz.; Namil, Abdelmoula; Sharif, Najam A.; Zinke, Paul W.;
Dean, Thomas R.

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K

CC 1-11 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO 2003051291 | A2 | 20030626 | WO 2002-US38625 | 20021205 <-- |
| | WO 2003051291 | A3 | 20031023 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR | | | | |
| PRAI | US 2001-340445P | P | 20011214 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|----------|------------------------------------|
| WO 2003051291 | ICM A61K | |

OS MARPAT 139:63347

AB The present invention provides novel compds. with 5-HT₂ agonist activity, compns. containing the compds. and methods of their use to lower **intraocular** pressure and/or provide neuroprotection. CNS activity of bufotenine fumarate was studied in mice.

ST hydroxyindole compd **glaucoma intraocular** pressure neuroprotection; bufotenine **glaucoma intraocular** pressure neuroprotection

IT 5-HT agonists
(5-HT_{2A}; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Glutamate antagonists
(NMDA antagonists; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Mitosis
(agents for; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Ion channel blockers
(calcium; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Cytoprotective agents
(neuroprotective; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Drug delivery systems
(solns., **ophthalmic**; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Antiglaucoma agents
Surfactants
Viscosity
(substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT **Prostaglandins**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Drug delivery systems
(suspensions, **ophthalmic**; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Adrenoceptor agonists
(α ₂-; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Adrenoceptor antagonists
(β -; substituted 5-hydroxyindole compds. for treatment of
glaucoma)

IT 9001-03-0, Carbonic anhydrase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; substituted 5-hydroxyindole compds. for treatment of
glaucoma)

IT 548797-06-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(substituted 5-hydroxyindole compds. for treatment of glaucoma
)

IT 9003-39-8, Polyvinylpyrrolidone 9004-62-0, Hydroxyethyl
cellulose 9004-65-3, Hydroxypropyl methyl cellulose
9004-67-5, Methyl cellulose 37353-59-6, Hydroxymethyl
cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted 5-hydroxyindole compds. for treatment of glaucoma
)

IT 9004-62-0, Hydroxyethyl cellulose 9004-65-3,
Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
37353-59-6, Hydroxymethyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted 5-hydroxyindole compds. for treatment of glaucoma
)

RN 9004-62-0 HCAPLUS
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

RN 9004-65-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

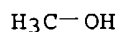
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

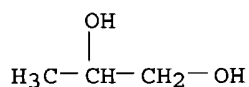
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O



CM 3

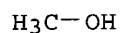
CRN 57-55-6
CMF C3 H8 O2RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

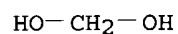
CRN 67-56-1
CMF C H4 ORN 37353-59-6 HCAPLUS
CN Cellulose, hydroxymethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 463-57-0
CMF C H4 O2

L116 ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:754995 HCAPLUS
DN 137:268473
ED Entered STN: 04 Oct 2002
TI Porous drug matrices and methods of manufacture thereof
IN Straub, Julie; Altreuter, David; Bernstein, Howard; Chickering, Donald E.;

Khattak, Sarwat; Randall, Greg
 PA Acusphere Inc., USA
 SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U. S. 6,395,300.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K009-14
 ICS A61K009-50
 NCL 424499000
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|------|----------|-----------------|--------------|
| PI | US 2002142050 | A1 | 20021003 | US 2002-53929 | 20020122 <-- |
| | US 6395300 | B1 | 20020528 | US 1999-433486 | 19991104 <-- |
| | US 6645528 | B1 | 20031111 | US 2000-694407 | 20001023 <-- |
| | ZA 2001010347 | A | 20030730 | ZA 2001-10347 | 20011218 <-- |
| PRAI | US 1999-136323P | P | 19990527 | <-- | |
| | US 1999-158659P | P | 19991008 | <-- | |
| | US 1999-433486 | A2 | 19991104 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|--|
| US 2002142050 | ICM | A61K009-14 |
| | ICS | A61K009-50 |
| | NCL | 424499000 |
| US 2002142050 | ECLA | A61K009/16P4; A61K009/16P2 <-- |
| US 6395300 | ECLA | A61K009/16P4; A61K009/16P2 <-- |
| US 6645528 | ECLA | A61K009/16H2; A61K009/16H6B; A61K009/16H4B; A61K009/16P4; A61K009/16P2 <-- |

AB Drugs, especially low aqueous solubility drugs, are provided in a porous matrix form, preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solution and hydrophilic or hydrophobic excipients that stabilize the drug and inhibit crystallization, and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. Hydrophobic or hydrophilic excipients may be selected to stabilize the drug in crystalline form by inhibiting crystal growth or to stabilize the drug in amorphous form by preventing crystallization. The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Thus, 5.46 g of PEG 8000, 0.545 g of prednisone, and 0.055 g of Span 40 were dissolved in 182 mL of methylene chloride. A solution of 3.27 g of ammonium bicarbonate in 18.2 mL of water was added to the organic solution (phase ratio 1:10) and homogenized for 5 min at 16,000 RPM. The resulting emulsion was spray dried on a benchtop spray dryer using an air-atomizing nozzle and nitrogen as the drying gas.

ST porous drug matrix microparticle prednisone bicarbonate
 IT Drug delivery systems
 (buccal; porous drug matrixes and methods of manufacture thereof)

IT Estrogens
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (conjugated; porous drug matrixes and methods of manufacture thereof)

IT Drying
 (fluid bed; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (inhalants; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (injections, i.m.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (injections, i.v.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (injections, s.c.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (microparticles; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (nasal; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (ophthalmic; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (oral; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (parenterals; porous drug matrixes and methods of manufacture thereof)

IT Dissolution
 Freeze drying
 Preservatives
 Solvents
 (porous drug matrixes and methods of manufacture thereof)

IT Amino acids, biological studies
 Carbohydrates, biological studies
 Granulocyte colony-stimulating factor receptors
 Interferons
 Interleukins
 Lecithins
 Polymers, biological studies
 Polyoxyalkylenes, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (porous drug matrixes and methods of manufacture thereof)

IT Crystallization
 (prevention of; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (rectal; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems
 (sublingual; porous drug matrixes and methods of manufacture thereof)

IT Drying
 (vacuum; porous drug matrixes and methods of manufacture thereof)

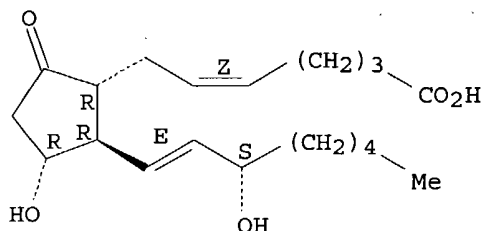
IT Drug delivery systems
 (vaginal; porous drug matrixes and methods of manufacture thereof)

IT 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 52-53-9,
 Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl
 estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa,
 biological studies 67-78-7 67-97-0, Vitamin D3 71-58-9,
 Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies
 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin
 128-13-2, Ursodiol 298-46-4, Carbamazepine 302-79-4, Tretinoin
 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl
 439-14-5, Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox
 631-61-8, Ammonium acetate 657-24-9, Metformin 745-65-3,
 Alprostadil 846-49-1, Lorazepam 1066-33-7, Ammonium bicarbonate
 1863-63-4, Ammonium benzoate 1951-25-3, Amiodarone 3239-44-9,
 Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone
 dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0,

Follitropin 9002-72-6, Growth hormone 9005-65-6, Tween 80
 9007-12-9, Calcitonin 9041-93-4, Bleomycin sulfate 10238-21-8,
 Glyburide 11096-26-7, Erythropoietin 12125-02-9, Ammonium chloride,
 biological studies 12629-01-5, Somatropin 12633-72-6, Amphotericin
 13311-84-7, Flutamide 15307-79-6, Diclofenac sodium 15307-86-5,
 Diclofenac 15687-27-1, Ibuprofen 18559-94-9, Albuterol 20830-75-5,
 Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1,
 Naproxen 25322-68-3, Polyethylene glycol 26266-57-9, Span 40
 27203-92-5, Tramadol 28860-95-9, Carbidopa 28981-97-7, Alprazolam.
 29094-61-9, Glipizide 30516-87-1, Zidovudine 32986-56-4, Tobramycin
 33069-62-4, Paclitaxel 34911-55-2, Bupropion 36505-84-7, Buspirone
 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 42399-41-7,
 Diltiazem 42924-53-8, Nabumetone 51333-22-3, Budesonide 51773-92-3,
 Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3,
 Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8,
 Albendazole 54965-24-1, Tamoxifen citrate 55268-75-2, Cefuroxime
 56124-62-0, Valrubicin 56180-94-0, Acarbose 60142-96-3, Gabapentin
 60205-81-4, Ipratropium. 63659-18-7, Betaxolol 65277-42-1,
 Ketoconazole 66085-59-4, Nimodipine 66376-36-1, Alendronate
 66852-54-8, Halobetasol propionate 68693-11-8, Modafinil 69655-05-6,
 Didanosine 70476-82-3, Mitoxantrone hydrochloride 72432-03-2, Miglitol
 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Lovendilol
 73384-59-5, Ceftriaxone 73590-58-6, Omeprazole 75330-75-5, Lovastatin
 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril
 maleate 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2,
 Nizatidine 77883-43-3, Doxazosin mesylate 78246-49-8, Paroxetine
 hydrochloride 78628-80-5, Terbinafine hydrochloride 78755-81-4,
 Flumazenil 79517-01-4, Octreotide acetate 79559-97-0, Sertraline
 hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin
 80274-67-5, Metoprolol fumarate 81098-60-4, Cisapride 81103-11-9,
 Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone
 hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine
 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6,
 Itraconazole 86386-73-4, Fluconazole 86541-74-4, Benazepril
 hydrochloride 86541-75-5, Benazepril 87679-37-6, Trandolapril
 89778-27-8, Toremifene citrate 90566-53-3, Fluticasone 91161-71-6,
 Terbinafine 91421-42-0, Rubitecan 93413-69-5, Venlafaxine
 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4, Atovaquone
 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6,
 Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7,
 Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate
 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin
 103577-45-3, Lansoprazole 103628-48-4, Sumatriptan succinate
 103775-10-6, Moexipril 104227-87-4, Famciclovir 104632-25-9,
 Pramipexole dihydrochloride 106266-06-2, Risperidone 106392-12-5,
 Pluronic f127 106463-17-6, Tamsulosin hydrochloride 106685-40-9,
 Adapalene 107753-78-6, Zafirlukast 109889-09-0, Granisetron
 110871-86-8, Sparfloxacin 111470-99-6, Amlodipine besylate
 111974-72-2, Quetiapine fumarate 112809-51-5, Letrozole 113806-05-6,
 Olopatadine 114798-26-4, Losartan 114977-28-5, Docetaxel
 115956-12-2, Dolasetron 120014-06-4, Donepezil 124832-26-4,
 Valacyclovir 127779-20-8, Saquinavir 131918-61-1, Paricalcitol
 132539-06-1, Olanzapine 134308-13-7, Tolcapone 134678-17-4, Lamivudine
 137862-53-4, Valsartan 140678-14-4, Mangafodipir trisodium
 142373-60-2, Tirofiban hydrochloride 144701-48-4, Telmisartan
 145040-37-5, Candesartan cilexetil 147059-72-1, Trovafloxacin
 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir 154248-97-2,
 Imiglucerase 154598-52-4, Efavirenz 155141-29-0, Rosiglitazone maleate
 155213-67-5, Ritonavir 158966-92-8, Montelukast 159989-65-8,
 Nelfinavir mesylate 161814-49-9, Amprenavir 162011-90-7, Rofecoxib
 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 260779-88-2,
 Cisapride monohydrate 679809-58-6, Enoxaparin sodium
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

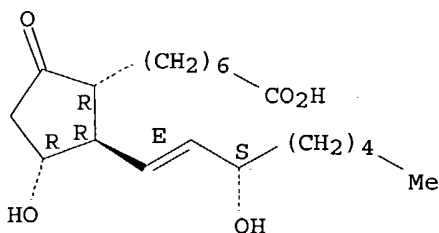
(porous drug matrixes and methods of manufacture thereof)
 IT 363-24-6, Dinoprostone 745-65-3, Alprostadiol
 9005-65-6, Tween 80
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (porous drug matrixes and methods of manufacture thereof)
 RN 363-24-6 HCAPLUS
 CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,
 (5Z,11 α ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 745-65-3 HCAPLUS
 CN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11 α ,13E,15S) - (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 9005-65-6 HCAPLUS
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 10 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:368323 HCAPLUS
 DN 136:363886
 ED Entered STN: 18 May 2002
 TI Improved treatment of glaucoma by intraocular pressure-reducing
 agent combination
 IN Richardson, Helene; Zimmerman, Thom J.; Challoner, Teresa; Jonsson, Per;
 Groenbladh, Anna; Oehagen, Patrik; Giesecker, Donald
 PA Pharmacia AB, Swed.
 SO PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-5575
 ICS A61K031-535
 CC 1-12 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|--------------|
| PI | WO 2002038158 | A1 | 20020516 | WO 2001-SE2499 | 20011112 <-- |
| | WO 2002038158 | C1 | 20030130 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2003018079 | A1 | 20030123 | US 2001-35963 | 20011109 <-- |
| | AU 2002015277 | A5 | 20020521 | AU 2002-15277 | 20011112 <-- |
| | EP 1333837 | A1 | 20030813 | EP 2001-983882 | 20011112 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | BR 2001015208 | A | 20031007 | BR 2001-15208 | 20011112 <-- |
| | JP 2004513148 | T2 | 20040430 | JP 2002-540741 | 20011112 <-- |
| | NO 2003002122 | A | 20030701 | NO 2003-2122 | 20030512 <-- |
| PRAI | US 2000-248123P | P | 20001113 | <-- | |
| | WO 2001-SE2499 | W | 20011112 | <-- | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|---|-------|---|
| | WO 2002038158 | ICM | A61K031-5575 |
| | | ICS | A61K031-535 |
| | JP 2004513148 | FTERM | 4C084/AA20; 4C084/BA44; 4C084/CA59; 4C084/MA02; 4C084/MA58; 4C084/NA05; 4C084/NA14; 4C084/ZA212; 4C084/ZA332; 4C084/ZA392; 4C084/ZC022; 4C084/ZC202; 4C086/AA01; 4C086/AA02; 4C086/BC85; 4C086/DA02; 4C086/GA09; 4C086/GA10; 4C086/MA02; 4C086/MA17; 4C086/MA58; 4C086/NA05; 4C086/NA14; 4C086/ZA21; 4C086/ZA33; 4C086/ZA39; 4C086/ZC02; 4C086/ZC20 <-- |
| AB | The present invention is directed to using two or more agents in combination with capacity of reducing the intraocular pressure (IOP) in a therapy with an improved efficacy to treat advanced glaucoma in such patients who suffer from detectable vision related impairments, when said agents are administered simultaneously. The combined use will also find advantage in treatment of individuals in need of a high IOP-reduction, such as those being exposed to risk factors rendering them susceptible to visual impairments. A fixed combination of latanoprost (50 µg/mL) and timolol (5 mg/mL) showed an unexpected efficacy in patients suffering from both abnormalities of the optic nerve head and visual field defects when compared to patients having an elevated IOP but otherwise free from complications. Eye drop formulations are given. | | |
| ST | glaucoma combination therapy; intraocular pressure reducing agent combination antiglaucoma; latanoprost timolol eye drop glaucoma treatment | | |
| IT | Quaternary ammonium compounds, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkylbenzylidimethyl, chlorides; improved treatment of glaucoma by intraocular pressure-reducing agent combination) | | |
| IT | Vision (disorder, field defects; improved treatment of glaucoma by intraocular pressure-reducing agent combination) | | |
| IT | Antiglaucoma agents Human (improved treatment of glaucoma by intraocular pressure-reducing agent combination) | | |

IT Ischemia
(in region of optical nerve head; improved treatment of glaucoma by
intraocular pressure-reducing agent combination)

IT Eye
(intraocular pressure, reduction of; improved treatment of
glaucoma by intraocular pressure-reducing agent combination)

IT Prostaglandins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(intraocular pressure-reducing; improved treatment of
glaucoma by intraocular pressure-reducing agent combination)

IT Drug delivery systems
(ophthalmic; improved treatment of glaucoma by
intraocular pressure-reducing agent combination)

IT Eye, disease
(optical nerve head damage; improved treatment of glaucoma by
intraocular pressure-reducing agent combination)

IT Drug delivery systems
(solns., ophthalmic; improved treatment of glaucoma by
intraocular pressure-reducing agent combination)

IT Eye
(uveosclera, agent increasing vitreous humor outflow from; improved
treatment of glaucoma by intraocular pressure-reducing agent
combination)

IT Eye
(vitreous humor, agent increasing uveoscleral outflow of or reducing
formation of; improved treatment of glaucoma by intraocular
pressure-reducing agent combination)

IT Adrenoceptor agonists
(β -; improved treatment of glaucoma by intraocular
pressure-reducing agent combination)

IT 26839-75-8, Timolol 26921-17-5, Timolol maleate 120373-24-2,
Isopropyl unoprostone 130209-82-4,
Latanoprost 157283-68-6, Travoprost
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(improved treatment of glaucoma by intraocular
pressure-reducing agent combination)

IT 1310-73-2, Sodium hydroxide, biological studies 7558-79-4, Disodium
phosphate 7558-80-7, Sodium dihydrogen phosphate 7647-01-0,
Hydrochloric acid, biological studies 7647-14-5, Sodium chloride,
biological studies 7732-18-5, Water, biological studies
9005-65-6, Polysorbate 80
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(improved treatment of glaucoma by intraocular
pressure-reducing agent combination)

IT 9001-03-0, Carbonic anhydrase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; improved treatment of glaucoma by intraocular
pressure-reducing agent combination)

IT 551-11-1D, Prostaglandin F₂ α , derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(intraocular pressure-reducing; improved treatment of
glaucoma by intraocular pressure-reducing agent combination)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Kiyoshi, I; Jpn J Ophthalmol 2000, V44, P227
(2) Michael, D; Graefe's Arch Clin Exp Ophthalmol 1998, V236, P577
(3) Michael, D; Survey of Ophthalmology 1997, V41, PS77
(4) Peter, R; Arch Ophthalmol 1996, V114, P268

IT 120373-24-2, Isopropyl unoprostone
130209-82-4, Latanoprost 157283-68-6,

Travoprost

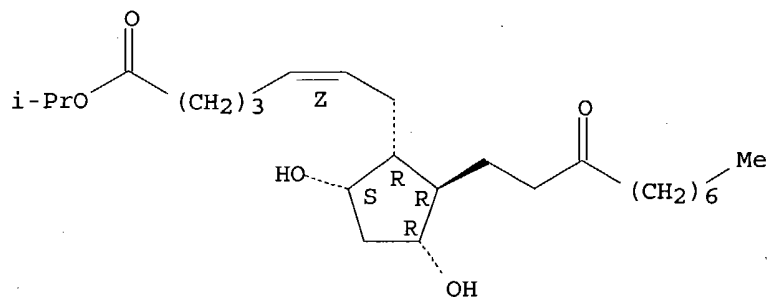
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(improved treatment of glaucoma by **intraocular**
pressure-reducing agent combination)

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

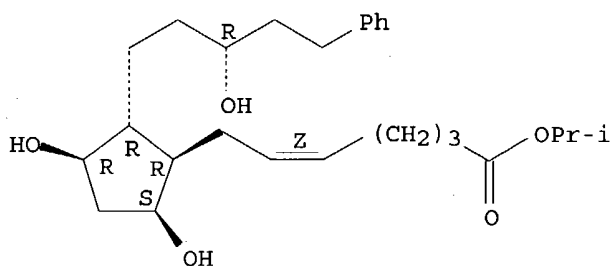
Absolute stereochemistry.
Double bond geometry as shown.



RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

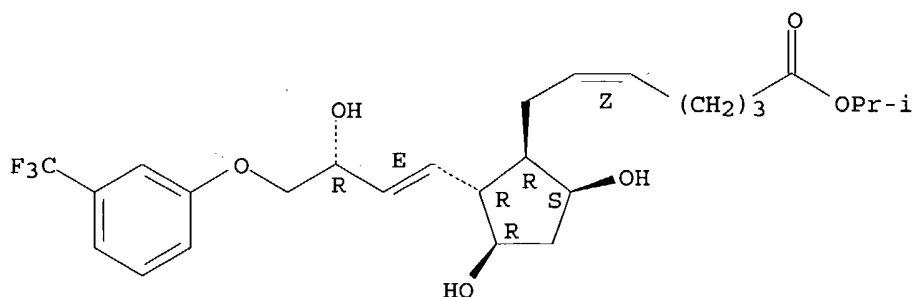
Absolute stereochemistry.
Double bond geometry as shown.



RN 157283-68-6 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



IT 9005-65-6, Polysorbate 80

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(improved treatment of glaucoma by **intraocular**
pressure-reducing agent combination)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

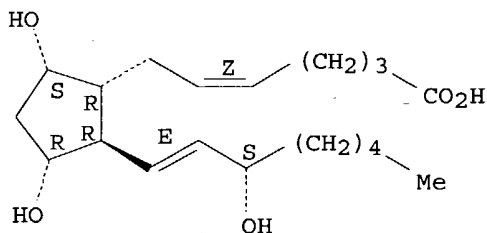
IT 551-11-1D, Prostaglandin F2 α , derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(**intraocular** pressure-reducing; improved treatment of
glaucoma by **intraocular** pressure-reducing agent combination)

RN 551-11-1 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,
(5Z,9 α ,11 α ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:220376 HCAPLUS

DN 136:252497

ED Entered STN: 22 Mar 2002

TI **Eye** drops containing prostaglandin derivatives and nonionic
surfactants and/or antioxidants

IN Morishima, Kenji; Kimura, Akio; Asada, Hiroyuki; Umeda, Masayuki; Kuwano,
Mitsuaki

PA Santen Pharmaceutical Co., Ltd., Japan; Asahi Glass Company, Ltd.

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5575

ICS A61K009-08; A61K047-34; A61K047-44; A61K047-18; A61K047-10;
A61P027-02

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|--------------|
| PI | WO 2002022131 | A1 | 20020321 | WO 2001-JP7928 | 20010913 <-- |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2001086210 | A5 | 20020326 | AU 2001-86210 | 20010913 <-- |
| | JP 2002161037 | A2 | 20020604 | JP 2001-277356 | 20010913 <-- |
| | EP 1321144 | A1 | 20030625 | EP 2001-965597 | 20010913 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | NO 2003001138 | A | 20030512 | NO 2003-1138 | 20030312 <-- |
| | US 2004097592 | A1 | 20040520 | US 2003-380401 | 20030312 <-- |
| PRAI | JP 2000-277554 | A | 20000913 | <-- | |
| | WO 2001-JP7928 | W | 20010913 | <-- | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|--|-------|--|
| | WO 2002022131 | ICM | A61K031-5575 |
| | | ICS | A61K009-08; A61K047-34; A61K047-44; A61K047-18; A61K047-10; A61P027-02 |
| AB | It is intended to produce eye drop preps. containing prostaglandin derivs. which are hardly soluble in water and liable to be adsorbed by resin containers or prostaglandin derivs. which are liable to decompose when dissolved in water. The solubility of prostaglandin derivs. in water can be improved and the adsorption thereof by resin containers can be remarkably inhibited by adding nonionic surfactants such as polysorbate 80 or polyoxyethylene-hardened castor oil 60 to eye drops. Moreover, the decomposition of prostaglandin derivs. can be remarkably inhibited by adding antioxidants such as disodium ethylenediaminetetraacetate or dibutylhydroxytoluene. The effect of addition of polysorbate 80 at 0.01 % in a solution containing 16-Phenoxy-15-deoxy-15,15-difluoro-17,18,19,20-tetranorprostaglandin F2 α iso-Pr ester 0.001 % in a polyethylene container on prevention of adsorption of the prostaglandin derivative to the container during storage was examined | | |
| ST | prostaglandin deriv ophthalmic soln nonionic surfactant | | |
| IT | Antioxidants (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants) | | |
| IT | Prostaglandins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants) | | |
| IT | Polyesters, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants in resin containers) | | |
| IT | Castor oil RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated; eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants) | | |
| IT | Surfactants (nonionic; eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants) | | |
| IT | Drug delivery systems | | |

(solns., **ophthalmic**; **eye** drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

IT 139-33-3, Disodium ethylenediaminetetraacetate 551-11-1D, Prostaglandin F2 α , derivs. 9005-65-6, Polysorbate 80 30587-81-6, Dibutylhydroxytoluene 209860-87-7
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (**eye** drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 24968-11-4, Polyethylene naphthalate 25038-59-9, Polyethylene terephthalate, biological studies 25230-87-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (**eye** drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants in resin containers)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

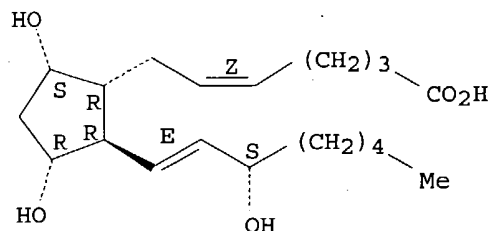
- (1) Alcon Laboratories Inc; JP 06316525 A 1994 HCAPLUS
- (2) Alcon Laboratories Inc; CA 2112027 A 1994 HCAPLUS
- (3) Alcon Laboratories Inc; US 5565492 A 1994 HCAPLUS
- (4) Alcon Laboratories Inc; EP 603800 A 1994 HCAPLUS
- (5) Alcon Laboratories Inc; AU 665287 B 1994 HCAPLUS
- (6) Allergan Inc; JP 09506081 A 1996
- (7) Allergan Inc; US 5486540 A 1996 HCAPLUS
- (8) Allergan Inc; US 5486540 A 1996 HCAPLUS
- (9) Allergan Inc; EP 725643 A 1996 HCAPLUS
- (10) Allergan Inc; AU 9480844 A 1996
- (11) Allergan Inc; WO 9511682 A 1996
- (12) Santen Pharmaceutical Co Ltd; JP 11071344 A 1998 HCAPLUS
- (13) Santen Pharmaceutical Co Ltd; CA 2225761 A 1998 HCAPLUS
- (14) Santen Pharmaceutical Co Ltd; US 5886035 A 1998 HCAPLUS
- (15) Santen Pharmaceutical Co Ltd; US 5985920 A 1998 HCAPLUS
- (16) Santen Pharmaceutical Co Ltd; EP 850926 A 1998 HCAPLUS
- (17) Santen Pharmaceutical Co Ltd; JP 10251225 A 1999 HCAPLUS
- (18) Santen Pharmaceutical Co Ltd; EP 930296 A 1999 HCAPLUS

IT 551-11-1D, Prostaglandin F2 α , derivs. 9005-65-6, Polysorbate 80 209860-87-7
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (**eye** drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

RN 551-11-1 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-, (5Z,9 α ,11 α ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 9005-65-6 HCAPLUS

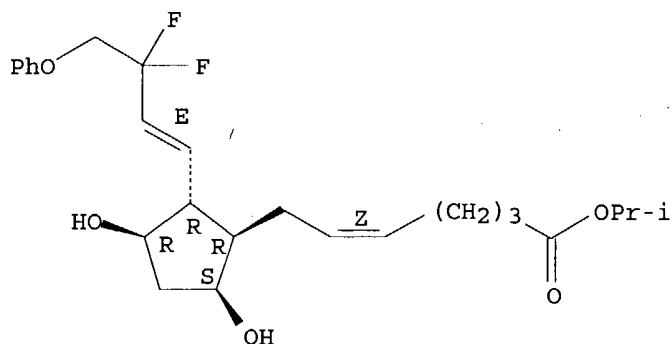
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 209860-87-7 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E)-3,3-difluoro-4-phenoxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 12 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:122796 HCAPLUS

DN 136:172791

ED Entered STN: 15 Feb 2002

TI Aqueous pharmaceutical compositions having a low gelation temperature

IN Suzuki, Hidekazu; Wada, Takahiro; Kirita, Masanobu; Takeuchi, Masanobu

PA Wakamoto Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5383

ICS A61K009-08; A61K047-12; A61K047-34; A61K047-38; A61P031-04

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|--|----------|-----------------|--------------|
| PI WO 2002011734 | A1 | 20020214 | WO 2001-JP6805 | 20010808 <-- |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| JP 2003160473 | A2 | 20030603 | JP 2000-240455 | 20000808 <-- |
| JP 3450805 | B2 | 20030929 | | |
| AU 2001078696 | A5 | 20020218 | AU 2001-78696 | 20010808 <-- |
| EP 1312366 | A1 | 20030521 | EP 2001-956809 | 20010808 <-- |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 3504656 | B2 | 20040308 | JP 2002-517070 | 20010808 <-- |
| NO 2003000533 | A | 20030226 | NO 2003-533 | 20030203 <-- |
| US 2003194441 | A1 | 20031016 | US 2003-344189 | 20030602 <-- |
| PRAI JP 2000-240455 | A | 20000808 | <-- | |
| WO 2001-JP6805 | W | 20010808 | <-- | |

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002011734 ICM A61K031-5383
ICS A61K009-08; A61K047-12; A61K047-34; A61K047-38;
A61P031-04

EP 1312366 ECLA A61K009/00M16; A61K031/5383 <--
US 2003194441 ECLA A61K009/00M16; A61K031/5383; A61K047/00R <--

AB The invention aims at providing an antimicrobial aqueous pharmaceutical composition
and an aqueous pharmaceutical composition which have a sufficiently low gelation temperature even when contain new quinolone antimicrobial agents such as ofloxacin as the active ingredient and can stay at the site of administration for a long time by virtue of rapid **viscosity** increase after administration in spite of their being liquid at administration and thereby attain high availability. The invention relates to an antimicrobial aqueous pharmaceutical composition containing 2.8 to 4 % weight/volume of Me cellulose, 2 weight/volume aqueous solution of which has a **viscosity** of 12mPa s or below at 20°, 1.5 to 2.3 % weight/volume of citric acid, 2 to 4 % weight/volume of polyethylene glycol, and 0.1 to 0.5 % weight/volume of ofloxacin.

ST pharmaceutical soln gelation cellulose citrate PEG; ofloxacin soln thermal gelation

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aqueous pharmaceutical compns. with low gelation temperature)

IT Drug delivery systems
(solns., **ophthalmic**; aqueous pharmaceutical compns. with low gelation temperature)

IT Drug delivery systems
(solns.; aqueous pharmaceutical compns. with low gelation temperature)

IT Gelation
(thermal; aqueous pharmaceutical compns. with low gelation temperature)

IT 50-21-5, Lactic acid, biological studies 52-21-1, Prednisolone acetate
54-71-7, Pilocarpine hydrochloride 56-84-8, Asparaginic acid, biological studies 61-76-7, Phenylephrine hydrochloride 72-17-3, Sodium lactate
77-92-9, Citric acid, biological studies 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 151-73-5, Betamethasone sodium phosphate 426-13-1, Fluorometholone 518-47-8, Sodium fluorescein 526-95-4, Gluconic acid 527-07-1, Sodium gluconate 1043-21-6, Pirenexine 1405-41-0, Gentamicin sulfate 1508-75-4, Tropicamide 7704-73-6, Sodium fumarate 9004-67-5, Methyl cellulose 14475-11-7, Sodium tartrate 15307-79-6, Diclofenac sodium 15826-37-6, Sodium cromoglycate 16177-21-2, Sodium L-glutamate 18016-19-8, Sodium maleate 25322-68-3, Polyethylene glycol 26921-17-5, Timolol maleate 34580-14-8, Ketotifen fumarate 51781-21-6, Carteolol hydrochloride 52549-17-4, Pranoprofen 53902-12-8, Tranilast 59277-89-3, Acyclovir 59865-13-3, Cyclosporin A 63659-19-8, Betaxolol hydrochloride 81486-22-8, Nipradilol 82419-36-1, Ofloxacin 91714-93-1, Bromfenac sodium 100986-85-4, Levofloxacin 114607-46-4, Acitazanolast 120373-24-2, **Isopropylunoprostone** 186826-86-8, Moxifloxacin hydrochloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aqueous pharmaceutical compns. with low gelation temperature)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(49) Wakamoto Pharmaceutics Co Ltd; AU 9853424 A1 1998 HCAPLUS
(50) Wakamoto Pharmaceutics Co Ltd; JP 200148807 A 2001
IT 9004-67-5, Methyl cellulose 120373-24-2,
Isopropylunoprostone
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aqueous pharmaceutical compns. with low gelation temperature)
RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

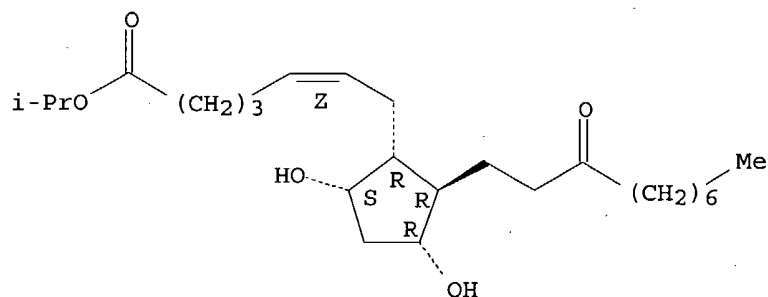
CRN 67-56-1
CMF C H4 O

H₃C-OH

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 13 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:11105 HCAPLUS

DN 136:90949

ED Entered STN: 04 Jan 2002

TI Compositions containing **isopropyl unoprostone** for reducing ocular hypertension

IN Reed, Kenneth Warren; Yen, Shau Fong; Sou, Mary; Peacock, Regina Flinn

PA Novartis AG, USA

SO U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 42,817, abandoned.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-445

NCL 514330000

CC 63-6 (Pharmaceuticals)

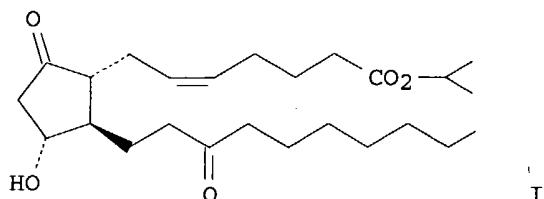
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | US 2002002185 | A1 | 20020103 | US 2001-812162 | 20010319 <-- |
| | US 6770675 | B2 | 20040803 | | |
| PRAI | US 1997-93065P | P | 19970317 | <-- | |
| | US 1998-42817 | B2 | 19980317 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|------------------------------------|
| US 2002002185 | ICM | A61K031-445 |
| | NCL | 514330000 |

GI



- AB An improved **ophthalmic** composition, includes docosanoid active agents, which are especially useful in lowering **intraocular** pressure associated with glaucoma. Improvements in IOP reduction efficacy, preservative efficacy and reduced additive concns. are achieved by utilizing the disclosed compns. which include a docosanoid active agent (e.g., iso-Pr **unoprostone**, I), in conjunction with selected nonionic surfactants, preservatives, and nonionic tonicity adjusting agents.
- ST **ocular** hypertension compn docosanoid; glaucoma **isopropyl unoprostone** compn
- IT Quaternary ammonium compounds, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylbenzylidimethyl, chlorides; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Antiglaucoma agents
 Buffers
 Chelating agents
 Preservatives
 (compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Polyoxyalkylenes, biological studies
 Quaternary ammonium compounds, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Surfactants
 (nonionic; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Fatty acids, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (sodium salts; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Drug delivery systems
 (solns., **ophthalmic**; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT 11129-12-7, Borate 14265-44-2, Phosphate, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (buffer; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT 50-70-4, Sorbitol, biological studies 54-64-8, Thimerosal 55-56-1, Chlorhexidine 56-81-5, Glycerol, biological studies 57-09-0, Cetyltrimethylammonium bromide 57-15-8, Chlorobutanol 59-50-7, 3-Methyl-4-chlorophenol 60-00-4, Edta, biological studies 60-12-8, 2-Phenylethanol 69-65-8, D-Mannitol 80-46-6, 4-tert-Amylphenol 90-43-7, 2-Phenylphenol 95-56-7D, o-Bromophenol, alkyl derivs. 95-57-8D, o-Chlorophenol, alkyl derivs. 97-23-4 98-54-4, 4-tert-Butylphenol 100-51-6, Benzenemethanol, biological studies 106-41-2D, p-Bromophenol, alkyl derivs. 106-48-9D, p-Chlorophenol, alkyl derivs. 112-80-1D, Oleic acid, sulfonated, sodium salts 117-80-6,

2,3-Dichloro-1,4-naphthoquinone 120-32-1, 2-Benzyl-4-chlorophenol
 121-54-0, Benzethonium chloride 122-99-6, 2-Phenoxyethanol 123-03-5,
 Cetylpyridinium chloride 148-24-3, 8-Quinolinol, biological studies
 1321-23-9, Chloroxylenol 1331-61-9, Benzenesulfonic acid, dodecyl-,
 ammonium salt 2027-47-6D, 9-Octadecenoic acid, sulfonated 3772-94-9,
 Pentachlorophenyl laurate 5324-84-5, Sodium 1-octanesulfonate
 5964-24-9, Thimerfonate sodium 9004-98-2, Brij 97 9005-63-4D,
 Polyoxyethylene sorbitan, ratty acid **esters 9005-65-6**,
 Polysorbate 80 13081-16-8, 4-Chloro-2-pentylphenol 13347-42-7,
 2-Cyclopentyl-4-chlorophenol 19379-90-9, Benzoxonium chloride
 25155-19-5, Naphthalenesulfonic acid 25155-30-0 25322-68-3, Peg
 25322-69-4, Polypropylene glycol 27177-77-1, Benzenesulfonic acid,
 dodecyl-, potassium salt 28757-47-3 30260-72-1 85721-33-1,
 Ciprofloxacin

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for
 reducing **ocular hypertension**)

IT 120373-24-2, **Isopropyl unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for reducing
ocular hypertension)

IT 56-81-5, Glycerol, biological studies 9005-63-4D,

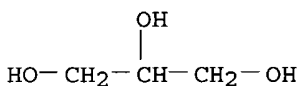
Polyoxyethylene sorbitan, ratty acid **esters 9005-65-6**,
 Polysorbate 80

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for
 reducing **ocular hypertension**)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9005-63-4 HCAPLUS

CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 120373-24-2, **Isopropyl unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

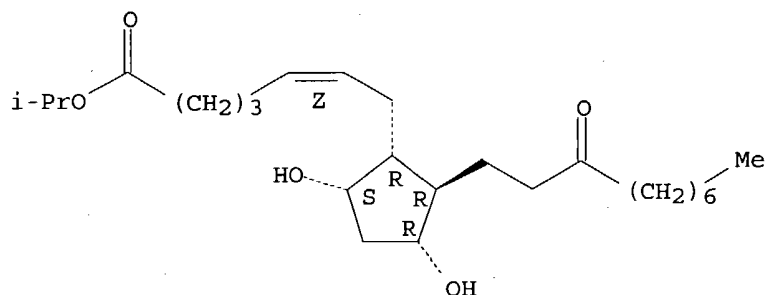
(comps. containing **iso-Pr unoprostone** for reducing
ocular hypertension)

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-
 oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L116 ANSWER 14 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:392607 HCAPLUS

DN 136:144916

ED Entered STN: 31 May 2001

TI Effects of **isopropyl unoprostone ophthalmic**
solution on cultured rabbit corneal epithelial cells

AU Wang, You-Dong; Kashiwagi, Kenji; Chen, Hai-Bo; Jin, Ming; Ou, Bo; Iizuka,
Yoko; Tanaka, Yuko; Tsukahara, Shigeo

CS Department of Ophthalmology, Yamanashi Medical University, Yamanashi,
409-3898, Japan

SO Ophthalmologica (2001), 215(3), 229-234

CODEN: OPHTAD; ISSN: 0030-3755

PB S. Karger AG

DT Journal

LA English

CC 1-8 (Pharmacology)

AB Purpose: To investigate the effects of iso-Pr **unoprostone** (referred to as **unoprostone**) **ophthalmic** solution on the barrier function of cultured rabbit corneal epithelium grown on permeable supports. Methods: Rabbit corneal epithelial cells cultured on collagen-coated filter inserts were administered one of the following for 30 min: **unoprostone** in vehicle solution (polysorbate 80), **unoprostone** in vehicle solution with a preservative (benzalkonium chloride), preservative only, or vehicle only. For a control, no chems. were added to the medium. After administration, the transepithelial elec. resistance (TER) measurement, a sensitive method by which to investigate the barrier function, and morphol. observation using phase-contrast microscopy were performed before exposure and at 0.5, 1, 3, 6, 12, 24, 48, and 72 h after exposure. The transmission electron-microscopic observation was performed before and 72 h after exposure in all exptl. conditions. Results: The cells exposed to **unoprostone** with the preservative showed a significant decrease in the TER, although no morphol. changes were observed. The corneal epithelial cells exposed to **unoprostone** without preservative, the vehicle only, or the preservative only did not show any differences from the control group at any measurements. Conclusion: The corneal barrier function is damaged by a combined solution of **unoprostone** and preservative, but not by a single solution of **unoprostone**, in vitro.

ST **isopropyl unoprostone ophthalmic soln** cornea
epithelium

IT Quaternary ammonium compounds, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(alkylbenzyltrimethyl, chlorides; effects of iso-Pr **unoprostone**
ophthalmic solution on cultured rabbit corneal epithelial cells)

IT **Eye**
(cornea, epithelium; effects of iso-Pr **unoprostone**
ophthalmic solution on cultured rabbit corneal epithelial cells).

IT 9005-65-6, Polysorbate 80

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(effects of iso-Pr unoprostone ophthalmic solution on
cultured rabbit corneal epithelial cells)

IT 120373-24-2, Isopropyl unoprostone

RL: PAC (Pharmacological activity); BIOL (Biological study)
(effects of iso-Pr unoprostone ophthalmic solution on
cultured rabbit corneal epithelial cells)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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IT 9005-65-6, Polysorbate 80

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(effects of iso-Pr unoprostone ophthalmic solution on
cultured rabbit corneal epithelial cells)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 120373-24-2, Isopropyl unoprostone

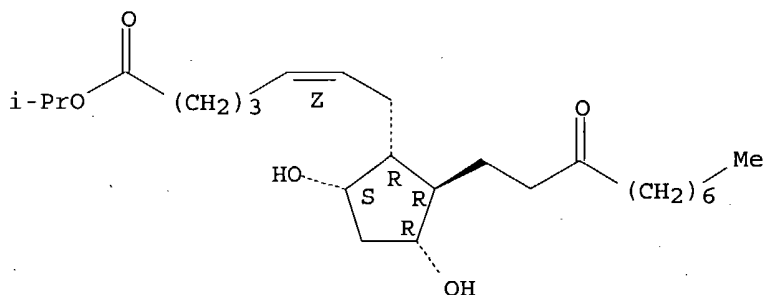
RL: PAC (Pharmacological activity); BIOL (Biological study)
(effects of iso-Pr unoprostone ophthalmic solution on
cultured rabbit corneal epithelial cells)

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-
oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L116 ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:152470 HCAPLUS

DN 134:198100

ED Entered STN: 02 Mar 2001

TI Oral liquid pharmaceuticals containing plasticizers and solubilizers

IN Wilson, Edward S.; Trespidi, Laura A.; Clark, Christy M.; Desai, Ashok J.; Meyer, Glenn A.; Sancilio, Frederick D.

PA Applied Analytical Industries, Inc., USA

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-48

ICS A61K009-52; A61K009-64; A61K009-66

CC 63-6 (Pharmaceuticals)

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|--------------|
| PI | WO 2001013897 | A1 | 20010301 | WO 2000-US19372 | 20000714 <-- |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 6365180 | B1 | 20020402 | US 1999-354982 | 19990716 <-- |
| | BR 2000012488 | A | 20020402 | BR 2000-12488 | 20000714 <-- |
| | EP 1196147 | A1 | 20020417 | EP 2000-948703 | 20000714 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | SI 20849 | C | 20021031 | SI 2000-20031 | 20000714 <-- |
| | JP 2003507415 | T2 | 20030225 | JP 2001-518035 | 20000714 <-- |
| | AU 770772 | B2 | 20040304 | AU 2000-62168 | 20000714 <-- |
| | NO 2002000208 | A | 20020318 | NO 2002-208 | 20020115 <-- |
| PRAI | US 1999-354982 | A | 19990716 | <-- | |
| | US 1998-71865P | P | 19980120 | <-- | |
| | US 1999-232354 | A2 | 19990115 | <-- | |
| | WO 2000-US19372 | W | 20000714 | <-- | |

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2001013897 ICM A61K009-48
ICS A61K009-52; A61K009-64; A61K009-66

AB The present invention relates to novel, liquid and semi-solid pharmaceutical compns. which can be administered in a liquid form or can be used for preparing

capsules containing such pharmaceutical compns. Also provided are methods of using and processes for preparing the pharmaceutical compns. of the present invention. Thus, a composition contained gemfibrozil 15.0, PEG-400 54.5, water 2.5, glycerin 10.0, Polysorbate-80 3.0, and PVP K29-32 15.0% by weight

ST oral liq pharmaceutical plasticizer solubilizer

IT Alcohols, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (C1-4; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carboxylic acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (aromatic; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carboxylic acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (arylalkyl; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems
 (capsules; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Gastrointestinal motility
 (gastric; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems
 (liqs., oral; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Anti-inflammatory agents
 (nonsteroidal; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Antihistamines
 Plasticizers
 Solubilizers
 Stabilizing agents
 Surfactants
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carbohydrates, biological studies
 Gelatins, biological studies
 Polymers, biological studies
 Polyoxyalkylenes, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems
 (semisolid; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT **Lactams**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (β -; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT 50-70-4, Sorbitol, biological studies 53-86-1, Indomethacin
 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,
 biological studies 57-66-9, Probenecid 59-92-7, Levodopa, biological
 studies 61-33-6, biological studies 61-68-7, Mefenamic acid 69-53-4,
 Ampicillin 99-66-1, Valproic acid 302-79-4, Retinoic acid 364-62-5,
 Metoclopramide 530-78-9, Flufenamic acid 644-62-2, Meclofenamic acid-
 5104-49-4, Flurbiprofen 6893-02-3, Liothyronine 9003-39-8, PVP
 9004-64-2, Hydroxypropyl cellulose 9004-65-3, HPMC
 9005-65-6, Tween-80 11111-12-9, Cephalosporin 12619-70-4,
 Cyclodextrin 15307-79-6, Diclofenac sodium 15307-86-5, Diclofenac
 15687-27-1, Ibuprofen 15826-37-6, Cromolyn sodium 16110-51-3, Cromolyn
 22071-15-4, Ketoprofen 22204-53-1, Naproxen 22494-42-4, Diflunisal
 25322-68-3, Polyethylene glycol 25812-30-0, Gemfibrozil 26171-23-3,
 Tolmetin 26787-78-0, Amoxicillin 28860-95-9, Carbidopa 29679-58-1,
 Fenoprofen 35700-23-3, Carboprost 38194-50-2, Sulindac
 41340-25-4, Etodolac 52214-84-3, Ciprofibrate 73590-58-6, Omeprazole

74103-06-3, Ketorolac 75330-75-5, Lovastatin 79902-63-9, Simvastatin
81093-37-0, Pravastatin 82419-36-1, Ofloxacin 83799-24-0, Fexofenadine
85441-61-8, Quinapril 85721-33-1, Ciprofloxacin 93957-54-1,
Fluvastatin 98079-51-7, Lomefloxacin 134523-00-5, Atorvastatin
145599-86-6, Cerivastatin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT 9000-83-3

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(proton-translocating, inhibitors; oral liquid pharmaceuticals containing
plasticizers and solubilizers).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Caldwell; US 5183829 A 1993 HCAPLUS

(2) Frisbee; US 6013280 A 2000 HCAPLUS

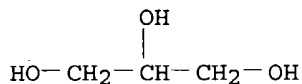
(3) Shelley; US 5505961 A 1996 HCAPLUS

IT 56-81-5, Glycerin, biological studies 9004-64-2,
Hydroxypropyl cellulose 9004-65-3, HPMC 9005-65-6,
Tween-80 35700-23-3, Carboprost

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral liquid pharmaceuticals containing plasticizers and solubilizers)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9004-64-2 HCAPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

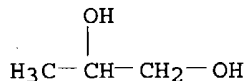
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6

CMF C3 H8 O2



RN 9004-65-3 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

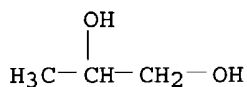
CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

CM 3

CRN 57-55-6
CMF C3 H8 O2

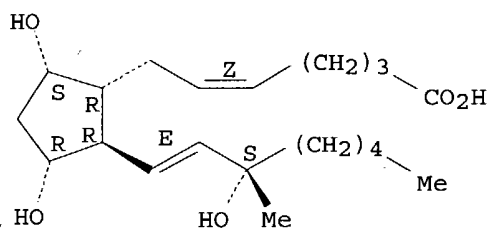


RN 9005-65-6 HCAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 35700-23-3 HCAPLUS
CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-15-methyl-,
(5Z,9α,11α,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:861473 HCAPLUS
DN 134:32972
ED Entered STN: 08 Dec 2000
TI Porous drug matrixes containing polymers and sugars and methods of their manufacture
IN Straub, Julie; Bernstein, Howard; Chickering, Donald E., III; Khatak, Sarwat; Randall, Greg
PA Acusphere, Inc., USA
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-16
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

PI WO 2000072827 A2 20001207 WO 2000-US14578 20000525 <--
 WO 2000072827 A3 20010125
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6395300 B1 20020528 US 1999-433486 19991104 <--
 EP 1180020 A2 20020220 EP 2000-939365 20000525 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 BR 2000010984 A 20020430 BR 2000-10984 20000525 <--
 JP 2003500438 T2 20030107 JP 2000-620939 20000525 <--
 NZ 516083 A 20030829 NZ 2000-516083 20000525 <--
 AU 768022 B2 20031127 AU 2000-54459 20000525 <--
 US 2002041896 A1 20020411 US 2001-798824 20010302 <--
 US 6610317 B2 20030826
 NO 2001005753 A 20020128 NO 2001-5753 20011126 <--
 ZA 2001010347 A 20030730 ZA 2001-10347 20011218 <--
 PRAI US 1999-136323P P 19990527 <--
 US 1999-158659P P 19991008 <--
 US 1999-433486 A 19991104 <--
 US 2000-186310P P 20000302 <--
 WO 2000-US14578 W 20000525 <--

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|---|
| WO 2000072827 | ICM | A61K009-16 |
| US 6395300 | ECLA | A61K009/16P4; A61K009/16P2 <-- |
| US 2002041896 | ECLA | A61K009/16H4B; A61K009/16H6B; A61K009/16H2; A61K009/16P4 <-- |

AB Drugs, especially low aqueous solubility drugs, are provided in a porous matrix form,

preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solns., and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Paclitaxel or docetaxel can be provided in a porous matrix form, which allows the drug to be formulated without solubilizing agents and administered as a bolus. For example, a nifedipine-loaded organic solution was prepared by dissolving 9.09 g of PEG 3350, 2.27 g of nifedipine, and 0.009 g of lecithin in 182 mL of methylene chloride. An aqueous solution was prepared by dissolving 3.27 g of NH₄HCO₃ and 0.91 g of PEG 3350 in 1.82 mL of water. The aqueous and organic solns. were homogenized and resulting emulsion

was spray dried. A suspension of the porous nifedipine drug matrix was prepared in 5% dextrose solution at a concentration of 2.5 mg/mL. A bolus injection of the suspension was tolerated when administered to dogs.

ST drug solubilization polymer sugar porous matrix; microparticle oral parenteral drug porous matrix

IT Artery
Bone
Eye
Heart
Lung
Mucous membrane
Neoplasm
Skin
Synovial fluid
(administration to; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(bolus, injections, i.v.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(buccal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(capsules; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Estrogens
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(conjugated; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Eye
(conjunctiva, administration to; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying
(fluidized-bed; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Pore
(forming agents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Polymers, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(hydrophilic; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(injections, i.m.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(injections, i.v.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(injections, s.c.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(intracranial; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(intratracheal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(microparticles; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(mucosal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(nasal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(oral; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(parenterals; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(powders; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Dissolution rate
Emulsions
Evaporation
Freeze drying
Particle size
Solubilization
Surface area
Suspensions
Wetting agents
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Interferons
Interleukins
Taxanes
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Carbohydrates, biological studies
Lecithins
Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(rectal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Volatile substances
(solvents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying
(spray; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(sublingual; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(suppositories, vaginal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(suppositories; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(tablets; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(topical; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying
(vacuum; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems
(vaginal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Salts, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(volatile, pore forming agents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Solvents
(volatile; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT 631-61-8, Ammonium acetate 1066-33-7, Ammonium bicarbonate 1863-63-4, Ammonium benzoate 12125-02-9, Ammonium chloride, uses
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 50-99-7, Dextrose, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa, biological studies 67-78-7 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs 71-58-9, Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin 128-13-2, Ursodiol 298-46-4, Carbamazepine 302-79-4, Tretinoin 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl 439-14-5, Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox 745-65-3, Alprostadil 846-49-1, Lorazepam 1951-25-3, Amiodarone 3239-44-9, Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0, Follitropin 9002-72-6, Growth hormone 9007-12-9, Calcitonin 9041-93-4, Bleomycin sulfate 10238-21-8, Glyburide 11096-26-7, Erythropoietin 12629-01-5, Somatropin 12633-72-6, Amphotericin 13311-84-7, Flutamide 15307-79-6, Diclofenac sodium 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 18559-94-9, Albuterol 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1, Naproxen 27203-92-5, Tramadol 28860-95-9, Carbidopa 28981-97-7, Alprazolam 29094-61-9, Glipizide 30516-87-1, Zidovudine 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 34911-55-2, Bupropion 36505-84-7, Buspirone 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 42399-41-7, Diltiazem 42924-53-8, Nabumetone 51022-70-9, Albuterol sulfate 51333-22-3, Budesonide 51773-92-3,

Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3,
 Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8,
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 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Carvedilol
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 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril
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 Nizatidine 77883-43-3, Doxazosin mesylate 78246-49-8, Paroxetine
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 hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin
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 Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone
 hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine
 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6,
 Itraconazole 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole
 86541-74-4, Benazepril hydrochloride 86541-75-5, Benazepril
 87679-37-6, Trandolapril 89778-27-8, Toremifene citrate 91161-71-6,
 Terbinafine 91421-42-0, Rubitecan 93413-69-5, Venlafaxine
 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4, Atovaquone
 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6,
 Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7,
 Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate
 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin
 103577-45-3, Lansoprazole 103628-48-4, Sumatriptan succinate
 103775-10-6, Moexipril 104227-87-4, Famciclovir 104632-25-9,
 Pramipexole dihydrochloride 106266-06-2, Risperidone 106463-17-6,
 Tamsulosin hydrochloride 106685-40-9, Adapalene 107753-78-6,
 Zafirlukast 109889-09-0, Granisetron 110871-86-8, Sparfloxacin
 111470-99-6, Amlodipine besylate 111974-72-2, Quetiapine fumarate
 112809-51-5, Letrozole 113806-05-6, Olopatadine 114798-26-4, Losartan
 114977-28-5, Docetaxel 115956-12-2, Dolasetron 120014-06-4, Donepezil
 124832-26-4, Valacyclovir 127779-20-8, Saquinavir 131918-61-1,
 Paricalcitol 132539-06-1, Olanzapine 134308-13-7, Tolcapone
 134678-17-4, Lamivudine 137862-53-4, Valsartan 140678-14-4,
 Mangafodipir trisodium 142373-60-2, Tirofiban hydrochloride
 143011-72-7, Granulocyte colony-stimulating factor 144701-48-4,
 Telmisartan 145040-37-5, Candesartan cilexetil 147059-72-1,
 Trovafloxacin 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir
 154248-97-2, Imiglucerase 154598-52-4, Efavirenz 155141-29-0,
 Rosiglitazone maleate 155213-67-5, Ritonavir 158966-92-8, Montelukast
 159989-65-8, Nelfinavir mesylate 161814-49-9, Amprenavir 162011-90-7,
 Rofecoxib 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate
 679809-58-6, Enoxaparin sodium

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
 use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

IT 64-17-5, Ethanol, biological studies 9003-43-4, Polyvinylpyrrolidone
 9005-65-6, Tween 80 25322-68-3, Polyethylene glycol
 26266-57-9, Span 40 106392-12-5, Pluronic F127 211733-74-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

IT 363-24-6, Dinoprostone 745-65-3, Alprostadil

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic

use); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of porous matrixes containing hydrophilic polymers and sugars

for

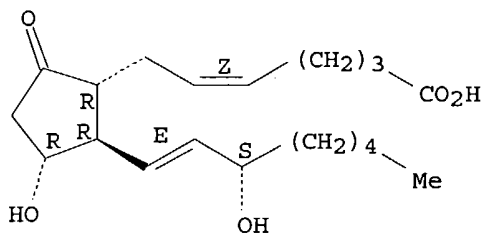
enhancement of drug dissoln.)

RN 363-24-6 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,
(5Z,11 α ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

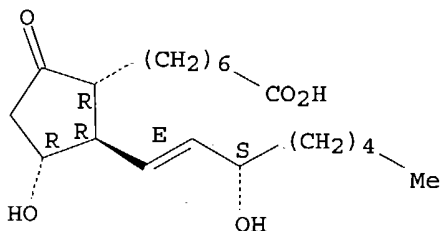


RN 745-65-3 HCAPLUS

CN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11 α ,13E,15S) - (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 9005-65-6, Tween 80

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:715858 HCAPLUS

DN 132:185338

ED Entered STN: 10 Nov 1999

TI Stability and preparation of dispersion of misoprostol-HPMC

AU Chen, Liangkang; Chen, Hailin; Zhang, Guoqing; Chen, Jianxing

CS Shanghai Institute of Planned Parenthood Research, Shanghai, 200032, Peop.
Rep. China

SO Shenyang Yaoke Daxue Xuebao (1999), 16(Suppl.), 4-6

CODEN: SYDXFF; ISSN: 1006-2858

PB Shenyang Yaoke Daxue Xuebao Bianjibu

DT Journal

LA Chinese
 CC 63-6 (Pharmaceuticals)
 AB The misoprostol-HPMC solid dispersions were prepared by a solvent evaporating method. The ratio of misoprostol to HPMC was 1:100, the **viscosity** of HPMC was E5. The stability of misoprostol was significantly improved by the method of solid dispersion HPMC.
 ST misoprostol HPMC solid dispersion prepn stability
 IT Drug delivery systems
 (liqs., dispersions; stability and preparation of misoprostol-HPMC dispersion)
 IT 9004-65-3, HPMC 59122-46-2, Misoprostol
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (stability and preparation of misoprostol-HPMC dispersion)
 IT 9004-65-3, HPMC 59122-46-2, Misoprostol
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (stability and preparation of misoprostol-HPMC dispersion)
 RN 9004-65-3 HCAPLUS
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

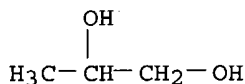
CM 2

CRN 67-56-1
 CMF C H4 O

H₃C-OH

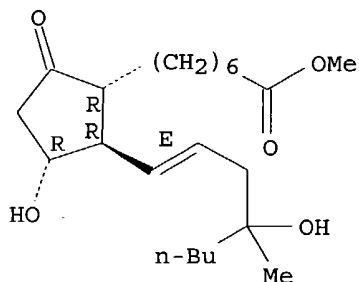
CM 3

CRN 57-55-6
 CMF C3 H8 O2



RN 59122-46-2 HCAPLUS
 CN Prost-13-en-1-oic acid, 11,16-dihydroxy-16-methyl-9-oxo-, methyl ester, (11 α ,13E)-(±)-(9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



L116 ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:659274 HCAPLUS

DN 131:291295

ED Entered STN: 15 Oct 1999

TI Gelling **ophthalmic** compositions containing xanthan gum

IN Bawa, Rajan; Hall, Rex E.; Kabra, Bhagwati P.; Teague, James E.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-36

CC 63-6 (Pharmaceuticals)

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-------------------|--------------|
| PI | WO 9951273 | A1 | 19991014 | WO 1999-US6106 | 19990326 <-- |
| | W: AU, BR, CA, CN, JP, KR, MX, NZ, TR, ZA | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2322579 | AA | 19991014 | CA 1999-2322579 | 19990326 <-- |
| | CA 2322579 | C | 20010828 | | |
| | AU 9931947 | A1 | 19991025 | AU 1999-31947 | 19990326 <-- |
| | AU 740586 | B2 | 20011108 | | |
| | BR 9910113 | A | 20001226 | BR 1999-10113 | 19990326 <-- |
| | EP 1069913 | A1 | 20010124 | EP 1999-913997 | 19990326 <-- |
| | EP 1069913 | B1 | 20030723 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | TR 200002848 | T2 | 20010221 | TR 2000-200002848 | 19990326 <-- |
| | NZ 506921 | A | 20020201 | NZ 1999-506921 | 19990326 <-- |
| | JP 2002510654 | T2 | 20020409 | JP 2000-542043 | 19990326 <-- |
| | AT 245451 | E | 20030815 | AT 1999-913997 | 19990326 <-- |
| | PT 1069913 | T | 20031128 | PT 1999-913997 | 19990326 <-- |
| | CN 1133466 | B | 20040107 | CN 1999-804558 | 19990326 <-- |
| | ES 2203103 | T3 | 20040401 | ES 1999-913997 | 19990326 <-- |
| | ZA 2000004413 | A | 20010522 | ZA 2000-4413 | 20000825 <-- |
| | HK 1031335 | A1 | 20040121 | HK 2001-102143 | 20010324 <-- |
| PRAI | US 1998-81004P | P | 19980407 | <-- | |
| | WO 1999-US6106 | W | 19990326 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
|------------|-------|------------------------------------|

| | | |
|------------|-----|------------|
| WO 9951273 | ICM | A61K047-36 |
|------------|-----|------------|

AB **Ophthalmic** drug delivery vehicles which are administrable as a liquid and which gel upon contact with the **eye** are disclosed. The vehicles contain xanthan gum (I). An **ophthalmic** composition contained timolol maleate 0.34, benzododecinium bromide 0.012, I 0.6, tromethamine 0.72, boric acid 0.3, mannitol 4.35, Polysorbate 80 0.05, and

water q.s. 100%.

ST **ophthalmic** gel xanthan gum timolol

IT pH
(adjusting agents; gelling **ophthalmic** compns. containing xanthan gum)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkylbenzyl dimethyl, chlorides; gelling **ophthalmic** compns. containing xanthan gum)

IT Cosmetics
(emollients; gelling **ophthalmic** compns. containing xanthan gum)

IT Allergy inhibitors
Anti-infective agents
Antiglaucoma agents
Buffers
Immunosuppressants
Lubricants
Preservatives
Solubilizers
Stabilizing agents
Surfactants
(gelling **ophthalmic** compns. containing xanthan gum)

IT Growth factors, animal
Steroids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gelling **ophthalmic** compns. containing xanthan gum)

IT Drug delivery systems
(gels, **ophthalmic**; gelling **ophthalmic** compns. containing xanthan gum)

IT Anti-inflammatory agents
(nonsteroidal; gelling **ophthalmic** compns. containing xanthan gum)

IT Anti-inflammatory agents
(steroidal; gelling **ophthalmic** compns. containing xanthan gum)

IT 50-70-4, Sorbitol, biological studies 69-65-8, Mannitol 77-86-1
7281-04-1, Benzododecinium bromide 9005-65-6, Polysorbate 80
10043-35-3, Boric acid, biological studies 11138-66-2, Xanthan gum
26839-75-8, Timolol 26921-17-5, Timolol maleate 32986-56-4, Tobramycin
49697-38-3, Rimexolone 51781-06-7, Carteolol 59803-98-4, Brimonidine
63659-19-8, Betaxolol hydrochloride 85721-33-1, Ciprofloxacin
113806-05-6, Olopatadine 116209-55-3, (S)-Betaxolol hydrochloride
130209-82-4, Latanoprost 135646-98-9,
15-Ketolatanoprost 140462-76-6, Olopatadine hydrochloride
246145-93-7
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gelling **ophthalmic** compns. containing xanthan gum)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Carrington, S; POLYMER 1996, V37(13), P2871 HCAPLUS
(2) Colgate Palmolive Co; EP 0331617 A 1989 HCAPLUS
(3) Lin, S; US 4136177 A 1979 HCAPLUS
(4) Nolte, H; CARBOHYDRATE POLYMERS 1992, V18(4), P243 HCAPLUS
(5) Shatwell, K; CARBOHYDRATE RESEARCH 1990, V206(1), P87 HCAPLUS

IT **9005-65-6, Polysorbate 80 130209-82-4,**
Latanoprost 135646-98-9, 15-Ketolatanoprost
246145-93-7
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gelling **ophthalmic** compns. containing xanthan gum)

RN 9005-65-6 HCAPLUS

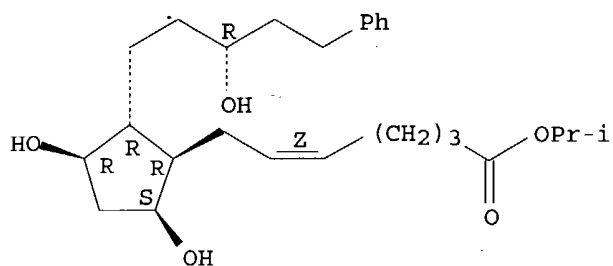
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

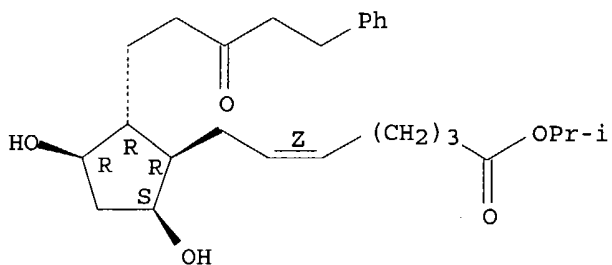
Absolute stereochemistry.
Double bond geometry as shown.



RN 135646-98-9 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

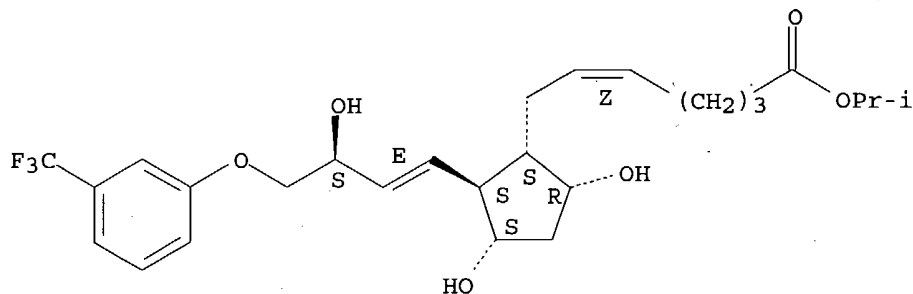
Absolute stereochemistry.
Double bond geometry as shown.



RN 246145-93-7 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 1-methylethyl ester, (5Z)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



DN 129:321195
 ED Entered STN: 06 Nov 1998
 TI Thermally gelling emulsions comprising cellulose ethers
 IN Kabra, Bhagwati P.
 PA Alcon Laboratories, Inc., USA
 SO U.S., 6 pp., Cont.-in-part of U.S. 5,618,800.
 CODEN: USXXAM

DT Patent
 LA English
 IC ICM A61K031-715
 ICS A01N043-04; C08B011-00; C08B011-08
 NCL 514057000
 CC 63-6 (Pharmaceuticals)

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | US 5827835 | A | 19981027 | US 1996-758787 | 19961203 <-- |
| | US 5618800 | A | 19970408 | US 1995-518289 | 19950823 <-- |
| PRAI | US 1994-298244 | B2 | 19940830 | <-- | |
| | US 1995-518289 | A2 | 19950823 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
| US 5827835 | ICM | A61K031-715 |
| | ICS | A01N043-04; C08B011-00; C08B011-08 |
| | NCL | 514057000 |

AB Thermally gelling emulsion compns. which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the eye, skin, mucous membrane or body cavity are disclosed. The emulsion compns. contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the compns. gel upon instillation in the eye. Thus, 0.3 g of methylethyl cellulose (I), 0.35 g of mannitol, 0.3 g of boric acid, and 0.066 g of tromethamine were combined with enough water to give 9.5 g of a composition I was hydrated by stirring the solution in an ice bath for 2 h. To this stirred composition, 0.5 g of Myritol 318 (caprylic/capric triglyceride) was added and the resulting mixture was stirred for fifteen minutes at room temperature to produce an emulsion.

ST thermal gelling pharmaceutical emulsion cellulose ether

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (animal; thermally gelling emulsions comprising cellulose ethers)

IT Drug delivery systems
 (emulsions; thermally gelling emulsions comprising cellulose ethers)

IT Fatty acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (esters; thermally gelling emulsions comprising cellulose ethers)

IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxylated; thermally gelling emulsions comprising cellulose ethers)

IT Antihypertensives
 (post-surgical; thermally gelling emulsions comprising cellulose ethers)

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (sesame; thermally gelling emulsions comprising cellulose ethers)

IT Anti-inflammatory agents
 (steroidal and non-steroidal; thermally gelling emulsions comprising cellulose ethers)

IT Allergy inhibitors
 Anti-infective agents
 Antiglaucoma agents

Dopamine agonists
 Emulsifying agents
 Immunosuppressants
 Surfactants
 (thermally gelling emulsions comprising cellulose ethers)

IT Corn oil
 Growth factors, animal
 Hydrocarbon oils
 Phospholipids, biological studies
Prostaglandins
 Proteins, general, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (thermally gelling emulsions comprising cellulose ethers)

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (vegetable; thermally gelling emulsions comprising cellulose ethers)

IT 124-07-2D, Caprylic acid, triglycerides 334-48-5D, Capric acid,
 triglycerides 9002-96-4 9003-11-6, Polyethylene oxide polypropylene
 oxide copolymer 9004-58-4, Ethylhydroxyethylcellulose.
 9004-59-5, Methylethylcellulose 9005-65-6,
 Polyoxyethylene sorbitan monooleate 25301-02-4, Oxyethylated tertiary
 octylphenol formaldehyde polymer
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (thermally gelling emulsions comprising cellulose ethers)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Anon; EP 0227494 B1 1987 HCAPLUS
- (2) Anon; WO 8911503 1989 HCAPLUS
- (3) Anon; WO 9209307 1992 HCAPLUS
- (4) Anon; JP WO9423750 1994
- (5) Ansmann; US 4798682 1989 HCAPLUS
- (6) Carlsson; US 5279660 1994 HCAPLUS
- (7) Carlsson; Colloids and Surfaces 1990, V47, P147 HCAPLUS
- (8) Chang; US 5296228 1994 HCAPLUS
- (9) Clement; US 5208028 1993 HCAPLUS
- (10) Davis; US 5192535 1993 HCAPLUS
- (11) Greminger; Chapter XXVIII 1973, P619 HCAPLUS
- (12) Haslam; US 4474751 1984 HCAPLUS
- (13) Haslam; US 4474752 1984 HCAPLUS
- (14) Henry; US 5126141 1992 HCAPLUS
- (15) Hoeg; US 5441732 1995 HCAPLUS
- (16) Joshi; US 5252318 1993 HCAPLUS
- (17) Jullander; Acta Chemica Scandinavica 1955, V9, P1291 HCAPLUS
- (18) Krezanoski; US 4188373 1980 HCAPLUS
- (19) Lin; US 4136177 1979 HCAPLUS
- (20) Lin; US 4136178 1979 HCAPLUS
- (21) Marlin; US 5358706 1994 HCAPLUS
- (22) Mazuel; US 4861760 1989 HCAPLUS
- (23) Missel; US 5212162 1993 HCAPLUS
- (24) Phares; US 3608073 1971 HCAPLUS
- (25) Pramoda; US 4136173 1979 HCAPLUS
- (26) Safwat; J of Controlled Release 1994, V32, P259 HCAPLUS
- (27) Sarkar; US 4001211 1977 HCAPLUS
- (28) Sarkar; J of Applied Polymer Science 1979, V24, P1073 HCAPLUS
- (29) Shimokawa; US 4708821 1987 HCAPLUS
- (30) Viegas; US 5077033 1991 HCAPLUS
- (31) Viegas; US 5124151 1992 HCAPLUS
- (32) Viegas; US 5143731 1992 HCAPLUS
- (33) Viegas; US 5306501 1994 HCAPLUS
- (34) Viegas; US 5318780 1994 HCAPLUS

IT 9004-58-4, Ethylhydroxyethylcellulose. 9004-59-5,
 Methylethylcellulose 9005-65-6, Polyoxyethylene sorbitan
 monooleate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thermally gelling emulsions comprising cellulose ethers)

RN 9004-58-4 HCAPLUS

CN Cellulose, ethyl 2-hydroxyethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1

CMF C2 H6 O2

HO-CH₂-CH₂-OH

CM 3

CRN 64-17-5

CMF C2 H6 O

H₃C-CH₂-OH

RN 9004-59-5 HCAPLUS

CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O

H₃C-OH

CM 3

CRN 64-17-5

CMF C2 H6 O

H₃C-CH₂-OH

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:635653 HCAPLUS

DN 129:265480

ED Entered STN: 08 Oct 1998

TI Compositions and methods for reducing ocular hypertension

IN Reed, Kenneth Warren; Yen, Shau-fong; Sou, Mary; Peacock, Regina Flinn

PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft
m.b.H.

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-557

ICS A61K009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | WO 9841208 | A1 | 19980924 | WO 1998-EP1483 | 19980313 <-- |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2280089 | AA | 19980924 | CA 1998-2280089 | 19980313 <-- |
| | AU 9870353 | A1 | 19981012 | AU 1998-70353 | 19980313 <-- |
| | AU 738781 | B2 | 20010927 | | |
| | EP 969846 | A1 | 20000112 | EP 1998-916948 | 19980313 <-- |
| | EP 969846 | B1 | 20040107 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LV, FI | | | | |
| | BR 9808016 | A | 20000308 | BR 1998-8016 | 19980313 <-- |
| | EE 9900410 | A | 20000417 | EE 1999-410 | 19980313 <-- |
| | EE 4091 | B1 | 20030815 | | |
| | NZ 337322 | A | 20010525 | NZ 1998-337322 | 19980313 <-- |
| | JP 2001515502 | T2 | 20010918 | JP 1998-540126 | 19980313 <-- |
| | RU 2197970 | C2 | 20030210 | RU 1999-121641 | 19980313 <-- |
| | AT 257385 | E | 20040115 | AT 1998-916948 | 19980313 <-- |
| | ZA 9802188 | A | 19980917 | ZA 1998-2188 | 19980316 <-- |
| | TW 527187 | B | 20030411 | TW 1998-87103809 | 19980316 <-- |
| | MX 9908471 | A | 20000228 | MX 1999-8471 | 19990915 <-- |
| | NO 9904481 | A | 19990916 | NO 1999-4481 | 19990916 <-- |
| PRAI | US 1997-819221 | A | 19970317 | <-- | |
| | WO 1998-EP1483 | W | 19980313 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
|------------|-------|------------------------------------|

| | | |
|------------|-----|-------------|
| WO 9841208 | ICM | A61K031-557 |
|------------|-----|-------------|

| | | |
|--|-----|------------|
| | ICS | A61K009-00 |
|--|-----|------------|

AB Disclosed is an improved ophthalmic composition, including prostaglandin active agents, which is especially useful in lowering intraocular pressure (IOP) associated with glaucoma. Improvements in IOP reduction efficacy, preservative efficacy and reduced additive concns. are achieved by utilizing the disclosed compns. which include a prostaglandin

active agent (e.g., iso-Pr **unoprostone**, a metabolite of an F-series prostaglandin), in conjunction with selected non-ionic surfactants, preservatives, and non-ionic tonicity adjusting agents. An **eye** solution contained iso-Pr **unoprostone** 0.18, Polysorbate-80 0.7, Brij-97 0.3, benzalkonium chlorides 0.011, EDTA 0.02, mannitol 4.7, and distilled water to 100 %. Instillation of .apprx.30 µL of the solution into the **eye** of a rabbit resulted in the reduction of IOP to 86 % of the initial IOP.

- ST glaucoma prostaglandin **ophthalmic** soln; **intraocular**
pressure redn **isopropylunoprostone eye drop**
- IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkylbenzyltrimethyl, chlorides; **ophthalmic** compns. containing
prostaglandins with preservatives and tonicity-adjusting agents for
reducing **ocular** hypertension)
- IT Antiglaucoma agents
Glaucoma (disease)
Preservatives
Surfactants
(**ophthalmic** compns. containing prostaglandins with preservatives
and tonicity-adjusting agents for reducing **ocular**
hypertension)
- IT Esters, biological studies
Phenols, biological studies
Polyoxyalkylenes, biological studies
Prostaglandins
Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**ophthalmic** compns. containing prostaglandins with preservatives
and tonicity-adjusting agents for reducing **ocular**
hypertension)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts, tall oil, sodium salts; **ophthalmic** compns. containing
prostaglandins with preservatives and tonicity-adjusting agents for
reducing **ocular** hypertension)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sodium salts; **ophthalmic** compns. containing prostaglandins with
preservatives and tonicity-adjusting agents for reducing **ocular**
hypertension)
- IT Drug delivery systems
(solns., **ophthalmic**; **ophthalmic** compns. containing
prostaglandins with preservatives and tonicity-adjusting agents for
reducing **ocular** hypertension)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tall-oil, sodium salts; **ophthalmic** compns. containing
prostaglandins with preservatives and tonicity-adjusting agents for
reducing **ocular** hypertension)
- IT 50-70-4, D-Sorbitol, biological studies 54-64-8, Thimerosal 55-56-1,
Chlorhexidine 56-81-5, Glycerol, biological studies 57-09-0,
Cetyltrimethylammonium bromide 57-15-8, Chlorbutanol 59-50-7,
3-Methyl-4-chlorophenol 60-00-4, EDTA, biological studies 60-12-8,
Phenylethyl alcohol 69-65-8, D-Mannitol 80-46-6, 4-tert-Amylphenol
88-04-0, Chloroxylenol 90-43-7, 2-Phenylphenol 97-23-4, Dichlorphen
98-54-4, 4-tert-Butylphenol 99-96-7D, p-Hydroxybenzoic acid, esters
100-51-6, Benzylalcohol, biological studies 106-41-2, p-Bromophenol
106-48-9, p-Chlorophenol 117-80-6, 2,3-Dichloro-1,4-naphthoquinone
120-32-1, 2-Benzyl-4-chlorophenol 121-54-0, Benzethonium chloride
122-99-6, Phenoxyethanol 123-03-5, Cetylpyridinium chloride 148-24-3,
8-Hydroxyquinoline, biological studies 1331-61-9, Dodecylbenzene
sulfonic acid ammonium salt 1405-20-5, Polymyxin B sulfate 3772-94-9,

Pentachlorophenyllaurate 3944-72-7, 1-Octane sulfonic acid 5964-24-9,
 Thimerfonate sodium 9004-98-2, Brij 97 9005-65-6, Polysorbate
 80 13081-16-8, 4-Chloro-2-pentylphenol 13347-42-7,
 2-Cyclopentyl-4-chlorophenol 19379-90-9, Benzoxonium chloride
 25155-19-5, Naphthalene sulfonic acid 25155-30-0, Dodecylbenzene
 sulfonic acid sodium salt 25322-68-3, Polyethylene glycol 25322-69-4,
 Polypropylene glycol 27177-77-1, Dodecylbenzene sulfonic acid potassium
 salt 28757-47-3 67993-50-4 85721-33-1, Ciprofloxacin 88951-32-0
120373-24-2, Isopropyl unoprostone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ophthalmic compns. containing prostaglandins with preservatives
 and tonicity-adjusting agents for reducing ocular
 hypertension)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

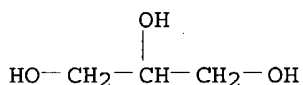
- RE
 (1) Alcon Laboratories; WO 9530420 A 1995 HCAPLUS
 (2) Allergan Inc; WO 9213836 A 1992 HCAPLUS
 (3) Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyujo; EP 0458587 A 1991 HCAPLUS
 (4) Suketu, D; US 5558876 A 1996 HCAPLUS

IT 56-81-5, Glycerol, biological studies 9005-65-6,
 Polysorbate 80 120373-24-2, **Isopropyl
 unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ophthalmic compns. containing prostaglandins with preservatives
 and tonicity-adjusting agents for reducing ocular
 hypertension)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9005-65-6 HCAPLUS

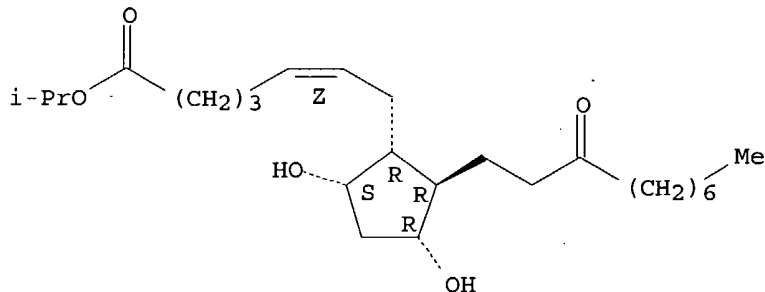
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



DN 129:166193
 ED Entered STN: 21 Aug 1998
 TI Therapeutic treatment and prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix
 IN Setterstrom, Jean A.; Van Hamont, John E.; Reid, Robert H.; Jacob, Elliot; Jeyanthi, Ramasubbu; Boedeker, Edgar C.; McQueen, Charles E.; Tice, Thomas R.; Roberts, F. Donald; Friden, Phil
 PA United States Dept. of the Army, USA; Van Hamont, John E.; et al.
 SO PCT Int. Appl., 363 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K009-52
 ICS A61K047-30
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 1, 2, 15

FAN.CNT 15

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|--|----------|-----------------|--------------|
| WO 9832427 | A1 | 19980730 | WO 1998-US1556 | 19980127 <-- |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| US 6309669 | B1 | 20011030 | US 1997-789734 | 19970127 <-- |
| AU 9863175 | A1 | 19980818 | AU 1998-63175 | 19980127 <-- |
| PRAI US 1997-789734 | A | 19970127 | <-- | |
| US 1984-590308 | B1 | 19840316 | <-- | |
| US 1992-867301 | A2 | 19920410 | <-- | |
| US 1995-446148 | A2 | 19950522 | <-- | |
| US 1995-446149 | B2 | 19950522 | <-- | |
| US 1996-590973 | B2 | 19960124 | <-- | |
| WO 1998-US1556 | W | 19980127 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|---|------------------------------------|
| WO 9832427 | ICM | A61K009-52 |
| | ICS | A61K047-30 |
| AB | Novel burst-free, sustained release biocompatible and biodegradable microcapsules are disclosed which can be programmed to release their active core for variable durations ranging from 1-100 days in an aqueous physiol. environment. The microcapsules are comprised of a core of polypeptide or other biol. active agent encapsulated in a matrix of poly(lactide/glycolide) copolymer, which may contain a pharmaceutically acceptable adjuvant, as a blend of uncapped free carboxyl end group and end-capped forms ranging in ratios from 100/0 to 1/99. | |
| ST | infection microcapsule sustained release peptide copolymer | |
| IT | Hepatitis (B, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) | |
| IT | Hepatitis (C, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) | |
| IT | Trypanosoma cruzi (Chagas' disease from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) | |
| IT | Immunoglobulins RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological | |

study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(G, ampicillin-specific; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

- IT Nervous system
(Huntington's chorea; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antitumor agents
(Kaposi's sarcoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Sperm
(acrosome, proteinase of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Diagnosis
(agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Ragweed (Ambrosia)
(allergy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Ameba
(amebiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antibiotics
(aminoglycoside; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Absidia ramosa
- Actinobacillus equuli
- Actinobacillus seminis
- Arcanobacterium pyogenes
- Aspergillus fumigatus
- Babesia caballi
- Brucella melitensis
- Campylobacter fetus
- Campylobacter fetus intestinalis
- Candida albicans
- Candida tropicalis
- Chlamydia psittaci
- Clostridium tetani
- Equid herpesvirus 1
- Equine arteritis virus
- Escherichia coli
- Gardnerella vaginalis
- Human herpesvirus 1
- Human herpesvirus 2
- Leptospira interrogans pomona
- Listeria monocytogenes
- Mycobacterium tuberculosis
- Mycoplasma bovigenitalium
- Mycoplasma hominis
- Neisseria gonorrhoeae
- Pneumocystis carinii
- Pseudomonas aeruginosa
- Rhodococcus equi
- Salmonella abortusovis
- Salmonella abortusovis
- Streptococcus group B
- Toxoplasma gondii
- Treponema pallidum
- Trichomonas vaginalis
- Tritrichomonas foetus
- Trypanosoma equiperdum

(antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mycobacterium
(antimycobacterial agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mouth
(aphthous ulcer; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drugs
(appetite stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Heart, disease
(arrhythmia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Blood vessel
(artificial, infections surrounding; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Dermatitis
(atopic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Babesia
(babesiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Skin, neoplasm
(basal cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
Skin, neoplasm
(basal cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Natural products, pharmaceutical
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(belladonna; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Prostate gland
(benign hyperplasia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polymers, biological studies
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Nervous system
(central, disease; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polymers, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(co-; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, disease
(colitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antigens
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(colony factor; prevention of infections with bioactive material

encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, neoplasm
(colorectal, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
Intestine, neoplasm
(colorectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Thrombosis
(coronary arterial; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Artery, disease
(coronary, thrombosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Vasodilators
(coronary; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Tapeworm (Cestoda)
(cysticercosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Bladder
(cystitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mental disorder
(depression; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Eye, disease
(diabetic retinopathy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polyesters, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(dilactone-based; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Digestive tract
(drugs for; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Brain, disease
(edema, peritumoral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(emulsions; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT B cell (lymphocyte)
T cell (lymphocyte)
(epitopes of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ergot; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Amino acids, biological studies
Fats and Glyceridic oils, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(essential; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fasciola
(fascioliasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Filaria
(filariasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anthelmintics
(filaricides; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Digestive tract
(gastroenteritis, virus causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, disease
(giardiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Transplant and Transplantation
(graft-vs.-host reaction; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Calymmatobacterium granulomatis
(granuloma inguinale from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antigens
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B surface; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Liver, neoplasm
(hepatoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
Liver, neoplasm
(hepatoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Human herpesvirus 2
(herpes genitalis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Human herpesvirus 3
(herpes zoster from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Parvovirus
Retroviridae
(human; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Globulins, biological studies
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hyperimmune; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Sexual behavior
(impotence; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT **Eye, disease**
Mouth
Skin, disease
(infection; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Prosthetic materials and Prosthetics
(infections surrounding; prevention of infections with bioactive

material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(inhalants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fertility
Ovary, neoplasm
Pancreas, neoplasm
(inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(injections; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Diabetes mellitus
(insulin-dependent; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Leishmania
(leishmaniasis from, visceral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(lung small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antibiotics
(macrolide; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(mammary gland; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(melanoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(microcapsules; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(microspheres; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(nasal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mammary gland
Prostate gland
(neoplasm, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mammary gland
Prostate gland
(neoplasm; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Meningitis
(neoplastic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Angiogenesis
(neovascularization, retinal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Diabetes mellitus
(non-insulin-dependent; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anti-inflammatory agents
(nonsteroidal; prevention of infections with bioactive material

encapsulated within biodegradable-biocompatible polymeric matrix)

IT Emulsions
(oil-in-water; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(oral; prevention of infections with bioactive material encapsulated
within biodegradable-biocompatible polymeric matrix)

IT Nitrites
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PROC (Process); USES (Uses)
(organic; prevention of infections with bioactive material encapsulated
within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(ovary; prevention of infections with bioactive material encapsulated
within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(pancreas; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anxiety
(panic disorder; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Paragonimus
(paragonimiasis; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Hormones, animal, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PROC (Process); USES (Uses)
(peptide; prevention of infections with bioactive material encapsulated
within biodegradable-biocompatible polymeric matrix)

IT Periodontium
(periodontitis; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mental disorder
(phobia; prevention of infections with bioactive material encapsulated
within biodegradable-biocompatible polymeric matrix)

IT Adhesion, biological
(postsurgical; prevention of infections with bioactive material
encapsulated within biodegradable-biocompatible polymeric matrix)

IT AIDS (disease)
Acinetobacter
Actinomycetales
Adenoviridae
Adrenoceptor agonists
Aerococcus
Aeromonas
Allergy inhibitors
Alzheimer's disease
Analgesics
Anesthetics
Angiogenesis
Angiogenesis inhibitors
Anthelmintics
Anti-infective agents
Anti-inflammatory agents
Antiarrhythmics
Antiarthritics
Antibacterial agents
Antibiotics
Anticholesteremic agents
Anticoagulants
Anticonvulsants

Antidepressants
Antidiabetic agents
Antidiarrheals
Antiemetics
Antihistamines
Antihypertensives
Antimalarials
Antimigraine agents
Antiparkinsonian agents
Antipyretics
Antirheumatic agents
Antiserums
Antitumor agents
Antitussives
Antiulcer agents
Antiviral agents
Appetite depressants
Arbovirus
Arcanobacterium haemolyticum
Arenavirus
Asthma
Bacillus (bacterium genus)
Biocompatibility
Blood substitutes
Bordetella
Borrelia
Bronchodilators
Brucella
Cachexia
Calymmatobacterium
Campylobacter
Cardiopulmonary bypass
Cardiotonics
Cardiovascular agents
Cholinergic agonists
Clostridium
Contraceptives
Coronavirus
Corynebacterium
Cryptosporidium parvum
Cystic fibrosis
Cytomegalovirus
Cytotoxic agents
Decongestants
Diagnosis
Diarrhea
Dissolution rate
Diuretics
Drug bioavailability
Drug dependence
Ebola virus
Echinococcus
Electrolytes, biological
Emulsifying agents
Enterobacteriaceae
Enterococcus
Enterovirus
Epitopes
Erysipelothrix
Expectorants
Filovirus
Flavobacterium
Freeze drying

Fungicides
Gardnerella
Gram-negative bacteria
Gram-positive bacteria (Firmicutes)
Haemophilus
Haemophilus ducreyi
Helicobacter
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus
Human immunodeficiency virus 1
Human parainfluenza virus
Human poliovirus
Hypercholesterolemia
Hypnotics and Sedatives
Immunization
Immunomodulators
Immunostimulants
Infection
Influenza virus
Kidney, disease
Lactococcus
Legionella
Leptospira
Leuconostoc
Listeria
Measles virus
Melanoma
Micrococcus
Molluscum contagiosum virus
Moraxella
Multiple sclerosis
Mumps virus
Muscle relaxants
Narcotics
Neisseria
Nervous system agents
Nutrients
Opioid antagonists
Osteoarthritis
Osteomyelitis
Osteoporosis
Ovary, neoplasm
Pancreas, neoplasm
Papillomavirus
Parasitocides
Parkinson's disease
Pediococcus
Planococcus (bacterium)
Plesiomonas
Pneumonia
Poxviridae
Pseudomonas
Psoriasis
Psychotropics
Rabies virus
Reoviridae
Respiratory syncytial virus
Rheumatoid arthritis
Rhinovirus

Rhodococcus
 Rotavirus
 Rothia (bacterium)
 Rubella virus
 Salmonella typhi
 Sexually transmitted diseases
 Shigella boydii
 Shigella dysenteriae
 Shigella flexneri
 Shigella sonnei
 Spirillum
 Staphylococcus
 Streptobacillus
 Streptococcus
 Thrombosis
 Tranquilizers
 Treponema
 Vaccines
 Vasodilators
 Vibrio
 Vibrio cholerae
 Wolinella succinogenes
 Yersinia
 (prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)
 IT Alkaloids, biological studies
 Antibodies
 Antigens
 Enzymes, biological studies
 Estrogens
 Glycolipids
 Glycopeptides
 Growth factors, animal
 Lipopolysaccharides
 Peptides, biological studies
 Pheromones, animal
 Progestogens
 Prostaglandins
 Proteins, general, biological studies
 Steroids, biological studies
 Sulfonamides
 Tetracyclines
 Vitamins
 RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
 (Device component use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PROC (Process); USES (Uses)
 (prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)
 IT Drug delivery systems
 (prodrugs; prevention of infections with bioactive material
 encapsulated within biodegradable-biocompatible polymeric matrix)
 IT Proliferation inhibition
 (proliferation inhibitors; prevention of infections with bioactive
 material encapsulated within biodegradable-biocompatible polymeric
 matrix)
 IT Antitumor agents
 (prostate gland; prevention of infections with bioactive material
 encapsulated within biodegradable-biocompatible polymeric matrix)
 IT Pilus
 (proteins; prevention of infections with bioactive material
 encapsulated within biodegradable-biocompatible polymeric matrix)
 IT Scalp
 (psoriasis of; prevention of infections with bioactive material

- encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems
(rectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Artery, disease
(restenosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Eye, disease
(retina, neovascularization; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Schistosoma
(schistosomiasis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Lung, neoplasm
(small-cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Lung, neoplasm
(small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Muscle relaxants
(spasmolytics; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Contraceptives
(spermicidal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Brain, disease
(spongiform encephalopathy, agent causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Appetite
(stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Brain, disease
(stroke; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Strongylus
(strongylodiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems
(sustained-release, programmable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Osteoporosis
(therapeutic agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Bile
(therapy with; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems
(topical; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Muscle, disease
(torticollis, spasmodic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Toxocara
(toxocariasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Toxoplasma gondii
(toxoplasmosis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(transdermal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Head
(trauma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Trichinella
(trichinellosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Trichomonas
(trichomoniasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(vaginal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Emulsions
(water-in-oil; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT **Lactams**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β -, **antibiotics**; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9002-72-6, Somatotropin
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(deficiency; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9005-49-6, Heparin, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(neutralization of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9001-60-9, Lactate dehydrogenase 37326-33-3, Hyaluronidase
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(of sperm; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 50-06-6, Phenobarbital, biological studies 50-12-4, Mephentytoin
50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, 17β -Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-52-2, Thioridazine 50-55-5, Reserpine 50-78-2, Aspirin 51-55-8, Atropine, biological studies 52-24-4, Thiotepe 52-76-6, Lynestrenol 53-03-2, Prednisone 53-16-7, Estrone, biological studies 53-86-1, Indomethacin 54-11-5, Nicotine 55-48-1, Atropine sulfate 55-63-0, Nitroglycerin 55-86-7, Nitrogen mustard 56-53-1, Diethyl stilbestrol 56-75-7, Chloramphenicol 57-27-2, Morphine, biological studies 57-33-0, Sodium pentobarbital 57-42-1, Meperidine 57-53-4, Meproamate 57-63-6, Ethinyl estradiol 57-85-2, Testosterone propionate 57-92-1, Streptomycin a, biological studies 58-08-2, Caffeine, biological studies 58-14-0, Pyrimethamine 58-22-0 58-25-3, Chlordiazepoxide 58-39-9, Perphenazine 58-73-1, Diphenhydramine 59-01-8, Kanamycin a 59-05-2, Methotrexate 59-92-7, L-Dopa, biological studies 61-33-6, Penicillin g, biological studies 67-20-9, Nitrofurantoin 68-22-4, Norethisterone 68-23-5, Norethynodrel 69-09-0, Chlorpromazine hydrochloride 69-53-4, Ampicillin 69-72-7D, Salicylic acid, derivs. 71-58-9, Medroxyprogesterone acetate 72-33-3, Mestranol 76-57-3, Codeine 79-57-2, Oxytetracycline 79-64-1, Dimethisterone 91-81-6, Tripeleminamine 103-90-2, Acetaminophen 113-15-5, Ergotamine 114-07-8, Erythromycin 114-49-8, Hyoscine hydrobromide 121-54-0 122-09-8, Phentermine 125-29-1, Dihydrocodeinone 125-71-3, Dextromethorphan 127-48-0, Trimethadione 128-62-1, Noscaphine 145-94-8, Chlorindanol 148-82-3, Melphalan

155-41-9, Methscopolamine bromide 288-32-4D, Imidazole, derivs.
 297-76-7, Ethynodiol diacetate 302-22-7, Chlormadinone acetate
 305-03-3, Chlorambucil 309-43-3, Sodium secobarbital 315-30-0,
 Allopurinol 434-03-7, Ethisterone 439-14-5, Diazepam 443-48-1,
 Metronidazole 469-62-5 471-34-1, Calcium carbonate, biological studies
 497-19-8, Sodium carbonate, biological studies 523-87-5, Dimenhydrinate
 546-93-0, Magnesium carbonate 578-66-5D, 8-Aminoquinoline, derivs.
 578-68-7D, 4-Aminoquinoline, derivs. 595-33-5, Megestrol acetate
 738-70-5, Trimethoprim 846-50-4, Temazepam 1397-89-3, Amphotericin b
 1397-94-0, Antimycin a 1403-66-3, Gentamicin 1404-26-8, Polymyxin b
 1404-90-6, Vancomycin 1406-05-9D, Penicillin, derivs. 4696-76-8,
 Kanamycin b 5588-33-0, Mesoridazine 5633-18-1, Melengestrol
 5786-21-0, Clozapine 5800-19-1, Metiapine 6533-00-2, Norgestrel
 7447-40-7, Potassium chloride (KCl), biological studies 8063-07-8,
 Kanamycin 9000-83-3, Atpase 9000-92-4, Amylase 9001-62-1, Lipase
 9001-63-2, Muramidase 9001-67-6, Neuraminidase 9001-78-9, Alkaline
 phosphatase 9001-99-4, Ribonuclease 9002-02-2, Succinic acid
 dehydrogenase 9002-07-7, Trypsin 9004-07-3, Chymotrypsin 9004-10-8,
 Insulin, biological studies 9025-82-5, Phosphodiesterase 9029-12-3,
 Glutamic acid dehydrogenase 9035-74-9, Glycogen phosphorylase
 9046-27-9, γ -Glutamyltranspeptidase 9079-67-8 10118-90-8,
 Minocycline 11111-12-9, Cephalosporins 13292-46-1, Rifampin
 14271-04-6 21645-51-2, Aluminum hydroxide, biological studies
 22232-71-9, Mazindol 24730-10-7, Dihydroergocristine methanesulfonate
 25447-66-9 26780-50-7, Poly(lactide co-glycolide) 26787-78-0,
 Amoxicillin 30516-87-1, Azt 32986-56-4, Tobramycin 35189-28-7,
 Norgestimate 37205-61-1, Proteinase inhibitor 37517-28-5, Amikacin
 53678-77-6D, Muramyl dipeptide, derivs. 53994-73-3, Cefaclor
 55268-75-2, Cefuroxime 61036-62-2, Teicoplanin 64221-86-9, Imipenem
 80738-43-8, Lincosamide 81103-11-9, Clarithromycin 82419-36-1,
 Ofloxacin 85721-33-1, Ciprofloxacin

RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
 (Device component use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PROC (Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)

IT 9002-60-2, Adrenocorticotropin, biological studies 9007-12-9, Calcitonin
 9034-40-6, Lhrh 62229-50-9, Epidermal growth factor 115966-68-2,
 Histatin 5 (human parotid saliva) 123781-17-9, Histatin 127716-52-3,
 Histatin 9 (human parotid saliva) 146553-69-7 174270-18-9,
 5-25-Histatin 6 (human parotid saliva) 186138-55-6 186138-60-3
 194017-97-5 211118-03-5

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP
 (Properties); THU (Therapeutic use); BIOL (Biological study); PROC
 (Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)

IT 9005-64-5, Tween 20 9005-65-6, Tween 80
 9005-67-8, Tween 60 106392-12-5, Pluronic

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic
 use); BIOL (Biological study); USES (Uses)

(prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)

IT 75-09-2, uses

RL: NUU (Other use, unclassified); USES (Uses)

(prevention of infections with bioactive material encapsulated within
 biodegradable-biocompatible polymeric matrix)

IT 146553-70-0 146553-71-1 146553-72-2 146553-73-3 146553-74-4
 146553-75-5 146553-76-6 146553-77-7 146553-78-8 146553-81-3
 146553-82-4 146553-83-5 146553-85-7 146553-86-8 146553-87-9
 146553-88-0 146553-89-1 146553-90-4 146553-91-5 146553-92-6
 164583-46-4 164583-50-0 164583-51-1 211118-14-8 211118-17-1

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Jeyanthi; Proceedings International Symposium on Controlled Release of Bioactive Materials 1996, P351 HCAPLUS
- (2) Oppenheim; US 5486503 A 1996 HCAPLUS
- (3) Syntex U S AInc; EP 0052510 B2 1994 HCAPLUS
- (4) Wang; J of Controlled Release 1991, V17, P23 HCAPLUS
- (5) Yan; J of Controlled Release 1994, V32(3), P231 HCAPLUS
- (6) Yeh; A Novel Emulsification-Solvent Extraction Technique for Production of Protein Loaded Biodegradable Microparticles for Vaccine and Drug Delivery 1995, V33(3), P437 HCAPLUS

IT 9005-64-5, Tween 20 9005-65-6, Tween 80

9005-67-8, Tween 60

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RN 9005-64-5 HCAPLUS

CN Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-67-8 HCAPLUS

CN Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:197383 HCAPLUS

DN 128:275079

ED Entered STN: 06 Apr 1998

TI Pharmaceutical composition forming a gel

IN Carlfors, Johan; Lindell, Katarina

PA Carlfors, Johan, Swed.; Lindell, Katarina

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-00

ICS A61K047-48; A61K047-36; A61K047-38

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | WO 9811874 | A1 | 19980326 | WO 1997-SE1592 | 19970922 <-- |
| | W: AU, CA, CN, JP, KR, RU, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | SE 9603480 | A | 19980324 | SE 1996-3480 | 19960923 <-- |
| | AU 9744077 | A1 | 19980414 | AU 1997-44077 | 19970922 <-- |
| | JP 2001501194 | T2 | 20010130 | JP 1998-514594 | 19970922 <-- |
| PRAI | SE 1996-3480 | A | 19960923 | <-- | |
| | WO 1997-SE1592 | W | 19970922 | <-- | |

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 9811874 ICM A61K009-00
 ICS A61K047-48; A61K047-36; A61K047-38

AB An in situ gel forming pharmaceutical composition for local administration to a target organ in the body, said composition essentially consisting of a water solution containing one or more aggregate forming surfactants, one or more gel forming water soluble polymers, a drug and optionally excipients, said drug having lipophilic properties, as it binds stronger to the aggregates of surfactants than to water, whereby its release from the in situ forming gel to the target organ occurs slowly. A composition was prepared containing **latanoprost** 200 µg, Et hydroxyethyl cellulose 40 mg, cetyltrimethylammonium bromide 13 mg and water to 4g.

ST pharmaceutical gel; ethyl hydroxyethyl cellulose pharmaceutical gel

IT Quaternary ammonium compounds, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylbenzylidimethyl, chlorides; pharmaceutical composition forming a gel)

IT Drug delivery systems
 (gels; pharmaceutical composition forming a gel)

IT **Eye**
 Lipophilicity
 Nose
 Preservatives
 Surfactants
 (pharmaceutical composition forming a gel)

IT Betaines
 Glycerides, biological studies
 Phospholipids, biological studies
 Polysaccharides, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (pharmaceutical composition forming a gel)

IT Osmotic pressure
 (regulators; pharmaceutical composition forming a gel)

IT 151-21-3, Sodium dodecyl sulfate, biological studies 8044-71-1, Cetrimide 9000-07-1, Carrageenan **9004-58-4**, Ethyl hydroxyethyl cellulose 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid **9005-63-4D**, Polyoxyethylene sorbitan, esters 12441-09-7D, Sorbitan, esters 54514-50-0 71010-52-1D, Gellan gum, deacetylated 75345-27-6, Polyquad
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (pharmaceutical composition forming a gel)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 69267-58-9, Timolol hydrochloride **130209-82-4**, **Latanoprost**
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (pharmaceutical composition forming a gel)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Cabane, B; Macromolecules 1996, V29, P3188 HCAPLUS
 (2) Goddard, E; J Soc Cosmet Chem 1990, V41, P23 HCAPLUS
 (3) Katarina, E; International Journal of Pharmaceutics 1996, V137, P233

IT **9004-58-4**, Ethyl hydroxyethyl cellulose **9005-63-4D**, Polyoxyethylene sorbitan, esters
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (pharmaceutical composition forming a gel)

RN 9004-58-4 HCAPLUS

CN Cellulose, ethyl 2-hydroxyethyl ether (9CI) (CA INDEX NAME)

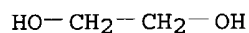
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

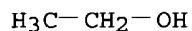
CM 2

CRN 107-21-1
CMF C2 H6 O2



CM 3

CRN 64-17-5
CMF C2 H6 O



RN 9005-63-4 HCAPLUS
CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

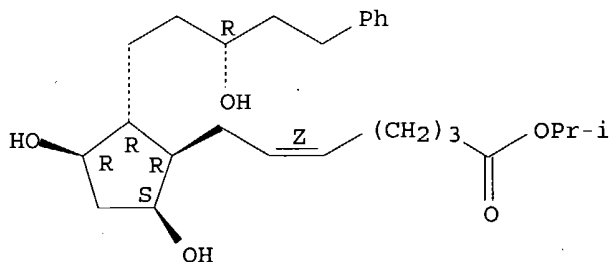
IT 130209-82-4, Latanoprost

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmaceutical composition forming a gel)

RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 23 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:124046 HCAPLUS

DN 128:196684

ED Entered STN: 28 Feb 1998

TI Pharmaceutical compositions containing a reverse thermally
viscosifying polymer network

IN Ron, Eyal S.; Bromberg, Lev; Orkisz, Michal; Kearney, Marie; Luczak,

Scott; Timm, Mary J.; Wrobel, Stanley J.
 PA Gel Sciences, Inc., USA
 SO PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K047-32
 ICS A61K047-34
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO 9806438 | A2 | 19980219 | WO 1997-US13988 | 19970812 <-- |
| | WO 9806438 | A3 | 19980625 | | |
| | W: CA, JP | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2263411 | AA | 19980219 | CA 1997-2263411 | 19970812 <-- |
| | EP 920338 | A2 | 19990609 | EP 1997-937165 | 19970812 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000516614 | T2 | 20001212 | JP 1998-509898 | 19970812 <-- |
| PRAI | US 1996-23996P | P | 19960812 | <-- | |
| | US 1996-25974P | P | 19960916 | <-- | |
| | US 1996-28183P | P | 19961015 | <-- | |
| | US 1996-30798P | P | 19961114 | <-- | |
| | US 1997-34174P | P | 19970102 | <-- | |
| | US 1997-34454P | P | 19970102 | <-- | |
| | WO 1997-US13988 | W | 19970812 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
| WO 9806438 | ICM | A61K047-32 |
| | ICS | A61K047-34 |

AB A pharmaceutical composition includes a pharmaceutically acceptable carrier, comprising a reverse thermally **viscosifying** polymer network. The polymer network includes at least one responsive polymer component, said responsive component capable of aggregation in solution in response to an environmental stimulus and at least one structural component, said structural component exhibiting self-repulsive interactions over use conditions. The responsive component is randomly bonded to said structural component and the polymer network characterized in that it **viscosifies** in response to said environmental stimulus. The composition further includes a pharmaceutically active agent which imparts a pharmaceutical effect, said carrier and said agent disposed within an aqueous-based medium. The composition is suitable for administration of the pharmaceutical agent across dermal, otic, rectal, vaginal, **ophthalmic**, esophageal and nasal mucosal membranes. A composition was prepared from Pluronic F27 and poly(acrylic acid).

ST pharmaceutical polyoxyalkylene acrylate **viscosifying**

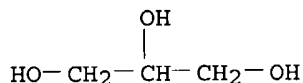
IT Alcohols, biological studies
 RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (C16-18; pharmaceutical compns. containing a reverse thermally **viscosifying** polymer network)

IT Polyoxyalkylenes, biological studies
 RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (acrylic; pharmaceutical compns. containing a reverse thermally **viscosifying** polymer network)

IT Polysiloxanes, biological studies
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene

- glycol acetate; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT Nervous system agents
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(miotics; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT Drug delivery systems
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT Polysiloxanes, biological studies
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT Adrenoceptor agonists
Analgesics
Anesthetics
Antacids
Anti-infective agents
Antiemetics
Antihistamines
Antihypertensives
Antipyretics
Antitumor agents
Antiulcer agents
Antiviral agents
Contraceptives
Decongestants
Diuretics
Flavor
Fungicides
Hormones, animal, biological studies
Laxatives
Minerals, biological studies
Muscarinic antagonists
Parkinson's disease
Prostaglandins
Steroids, biological studies
Tranquilizers
Vaccines
Viscosity
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT **Acrylic polymers, biological studies**
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(polyoxyalkylene-; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT Muscle relaxants
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(spasmolytics; pharmaceutical compns. containing a reverse thermally
viscosifies polymer network)
- IT Contraceptives
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(spermicidal; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT Drug delivery systems
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sprays; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT Adrenoceptor antagonists

- RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β -; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT 9001-03-0, Carbonic anhydrase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; pharmaceutical compns. containing a reverse thermally
viscosifying polymer network)
- IT 56-81-5, 1,2,3-Propanetriol, biological studies 67-63-0,
Isopropanol, biological studies 77-92-9, Citric acid, biological studies
81-13-0, Panthenol 139-33-3, Disodium EDTA 872-50-4, biological
studies 7447-40-7, Potassium chloride, biological studies 9016-45-9
9051-57-4, Rhodapex CO-436 12616-49-8, Plurafac C-17 26027-38-3,
Nonoxynol 9 51410-72-1 74775-06-7, Crodamol PMP 81646-13-1
84517-95-3, Germaben II
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT 60621-84-3P
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT 9005-65-6, Tween 80 106392-12-5, Pluronic L122
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT 54182-58-0, Sucralfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- IT 56-81-5, 1,2,3-Propanetriol, biological studies
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- RN 56-81-5 HCAPLUS
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



- IT 9005-65-6, Tween 80
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing a reverse thermally **viscosifying**
polymer network)
- RN 9005-65-6 HCAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:262698 HCAPLUS
DN 126:321069
ED Entered STN: 24 Apr 1997
TI Thermally-gelling drug delivery vehicles containing cellulose ethers

IN Kabra, Bhagwati P.; Lang, John C.
 PA Alcon Laboratories, Inc., USA
 SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 298,244, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K031-715
 ICS C08B011-02; C08B011-08
 NCL 514057000
 CC 63-5 (Pharmaceuticals)
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|------------------|--------------|
| PI | US 5618800 | A | 19970408 | US 1995-518289 | 19950823 <-- |
| | CA 2172373 | AA | 19960307 | CA 1995-2172373 | 19950823 <-- |
| | CA 2172373 | C | 19990316 | | |
| | CN 1134662 | A | 19961030 | CN 1995-190826 | 19950823 <-- |
| | ES 2162638 | T3 | 20020101 | ES 1995-931603 | 19950823 <-- |
| | PT 725628 | T | 20020328 | PT 1995-931603 | 19950823 <-- |
| | TW 460288 | B | 20011021 | TW 1995-84108938 | 19950828 <-- |
| | US 5827835 | A | 19981027 | US 1996-758787 | 19961203 <-- |
| PRAI | US 1994-298244 | B2 | 19940830 | <-- | |
| | US 1995-518289 | A2 | 19950823 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
| US 5618800 | ICM | A61K031-715 |
| | ICS | C08B011-02; C08B011-08 |
| | NCL | 514057000 |

AB Drug delivery vehicles which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the **eye**, skin, mucous membrane or body cavity are disclosed. The vehicles contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the vehicles gel upon instillation in the **eye**. A solution containing methylcellulose 2.5, disodium hydrogen phosphate and anhydrous sodium phosphate monohydrate 1.3% was prepared having osmolality of 291 mOsm and pH = 7.3. The **viscoelastic** properties of the solution in pre-dose (25°) and post-dose (35°) states were measured. At the end of the isotherm at 25°, G', G'', and G* values were about 4 Pa, 4 Pa, and 6 Pa resp. At the end of the isotherm at 35°, G', G'', G* values were about 7 Pa, 4 Pa, 8 Pa resp. Thus increasing temperature from 25°-35°, this solution did not gel and did not show a significant increase in storage modulus even though it contained an amount of phosphate salts sufficient to raise the osmolality of the solution to 293 mOsm.

ST drug delivery vehicle gelling cellulose ether

IT **Glaucoma (disease)**

(inhibitors; thermally-gelling drug delivery vehicles containing cellulose ethers)

IT Allergy inhibitors

Anti-inflammatory agents

Antibacterial agents

Antihypertensives

Dopamine agonists

Drug delivery systems

Immunosuppressants

(thermally-gelling drug delivery vehicles containing cellulose ethers)

IT Growth factors, animal

Prostaglandins

Proteins, general, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermally-gelling drug delivery vehicles containing cellulose ethers)
IT 3812-32-6, Carbonate ion, biological studies 7558-79-4, Dibasic sodium
phosphate 9004-34-6D, Cellulose, ethers, biological studies
9004-59-5, Methyleneethyl cellulose 9004-62-0, Hydroxyethyl
cellulose 9004-67-5, Methyl cellulose 10049-21-5, Monosodium
phosphate monohydrate 12258-53-6 14265-44-2, Phosphate, biological
studies 16887-00-6, Chloride ion, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thermally-gelling drug delivery vehicles containing cellulose ethers)
IT 9004-34-6D, Cellulose, ethers, biological studies 9004-59-5**
* , Methyleneethyl cellulose ***9004-62-0, Hydroxyethyl cellulose
9004-67-5, Methyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thermally-gelling drug delivery vehicles containing cellulose ethers)
RN 9004-34-6 HCAPLUS
CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-59-5 HCAPLUS
CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

H₃C—OH

CM 3

CRN 64-17-5
CMF C2 H6 O

H₃C—CH₂—OH

RN 9004-62-0 HCAPLUS
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

RN 9004-67-5 HCAPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)
 CM 1
 CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2
 CRN 67-56-1
 CMF C H4 O

H₃C-OH

L116 ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1996:350257 HCAPLUS
 DN 125:19002
 ED Entered STN: 18 Jun 1996
 TI Thermally-gelling **ophthalmic** drug delivery vehicles containing
 cellulose ethers
 IN Kabra, Bhagwati P.; Lang, John C.
 PA Alcon Laboratories, Inc., USA
 SO PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K009-00
 ICS A61K047-38
 CC 63-5 (Pharmaceuticals)
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | WO 9606597 | A1 | 19960307 | WO 1995-US10877 | 19950823 <-- |
| | W: AU, CA, CN, JP, MX | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2172373 | AA | 19960307 | CA 1995-2172373 | 19950823 <-- |
| | CA 2172373 | C | 19990316 | | |
| | AU 9534965 | A1 | 19960322 | AU 1995-34965 | 19950823 <-- |
| | AU 686455 | B2 | 19980205 | | |
| | EP 725628 | A1 | 19960814 | EP 1995-931603 | 19950823 <-- |
| | EP 725628 | B1 | 20011107 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | CN 1134662 | A | 19961030 | CN 1995-190826 | 19950823 <-- |
| | JP 09508143 | T2 | 19970819 | JP 1995-508897 | 19950823 <-- |
| | AT 208186 | E | 20011115 | AT 1995-931603 | 19950823 <-- |
| | ES 2162638 | T3 | 20020101 | ES 1995-931603 | 19950823 <-- |
| | PT 725628 | T | 20020328 | PT 1995-931603 | 19950823 <-- |
| | TW 460288 | B | 20011021 | TW 1995-84108938 | 19950828 <-- |
| | HK 1012558 | A1 | 20020222 | HK 1998-113839 | 19981217 <-- |
| PRAI | US 1994-298244 | A | 19940830 | <-- | |
| | WO 1995-US10877 | W | 19950823 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|--|------------------------------------|
| WO 9606597 | ICM | A61K009-00 |
| | ICS | A61K047-38 |
| WO 9606597 | ECLA | A61K009/00M16; A61K047/38 |
| AB | Drug delivery vehicles which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the eye , skin, mucous membrane of body cavity are disclosed. The vehicles contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the vehicles gel upon instillation in the eye . A solution of 3% methylethyl cellulose was stirred in ice bath for 2 h to completely hydrate the polymer, then the solution was left at room temperature; the osmolality of this solution was .apprx.13 mOsm. The viscoelastic properties of the solution was measured at 25° for 30 min followed by a ramp from 25-35° at a rate of 1°/min and followed by an isotherm at 35° for 60 min. by dynamic mech. thermal analyzer. The storage modulus of this sample increased by more than 50 Pa by raising the temperature from 25 to 35°. | |
| ST | gelling ophthalmic drug vehicle cellulose ether | |
| IT | Glaucoma (disease) (inhibitors; thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | Allergy inhibitors Anion exchangers Anti-infective agents Antihypertensives Cation exchangers Gelation Immunosuppressants Inflammation inhibitors (thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | Animal growth regulators Prostaglandins Proteins, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | Neurotransmitter agonists (dopaminergic, thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | Pharmaceutical dosage forms (ophthalmic , thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | 9004-58-4, Ethylhydroxyethyl cellulose 9004-59-5, Methylethyl cellulose RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | 75345-27-6, Polyquad RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |
| IT | 9004-34-6D, Cellulose, ethers RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thermally-gelling ophthalmic drug delivery vehicles containing cellulose ethers) | |

IT 9004-58-4, Ethylhydroxyethyl cellulose 9004-59-5,
Methylethyl cellulose
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(thermally-gelling **ophthalmic** drug delivery vehicles containing
cellulose ethers)
RN 9004-58-4 HCAPLUS
CN Cellulose, ethyl 2-hydroxyethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

CM 3

CRN 64-17-5
CMF C2 H6 O

H₃C-CH₂-OH

RN 9004-59-5 HCAPLUS
CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

CM 3

CRN 64-17-5
CMF C2 H6 O

H₃C-CH₂-OH

IT 9004-34-6D, Cellulose, ethers
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (thermally-gelling ophthalmic drug delivery vehicles containing
 cellulose ethers)
 RN 9004-34-6 HCAPLUS
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 26 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:528646 HCAPLUS
 DN 122:274071
 ED Entered STN: 06 May 1995
 TI Bioadhesive emulsions for enhanced drug delivery
 IN Friedman, Doron; Schwarz, Joseph; Amselem, Shimon
 PA Pharmos Corp., USA
 SO PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K009-107
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO 9505163 | A1 | 19950223 | WO 1994-US8803 | 19940805 <-- |
| | W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KR, KZ, LK, LT, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN | | | | |
| | RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5744155 | A | 19980428 | US 1993-106262 | 19930813 <-- |
| | CA 2169357 | AA | 19950223 | CA 1994-2169357 | 19940805 <-- |
| | AU 9474511 | A1 | 19950314 | AU 1994-74511 | 19940805 <-- |
| | AU 692460 | B2 | 19980611 | | |
| | EP 714289 | A1 | 19960605 | EP 1994-924125 | 19940805 <-- |
| | R: AT, BE, CH, DE, FR, GB, IE, IT, LI, LU | | | | |
| | IL 110588 | A1 | 20000601 | IL 1994-110588 | 19940808 <-- |
| | US 5993846 | A | 19991130 | US 1998-63660 | 19980421 <-- |
| PRAI | US 1993-106262 | A | 19930813 | <-- | |
| | WO 1994-US8803 | W | 19940805 | <-- | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|--|-------|---|
| | WO 9505163 | ICM | A61K009-107 |
| | WO 9505163 | ECLA | A61K009/00M16; A61K009/00M18D; A61K009/107D <-- |
| | US 5744155 | ECLA | A61K009/00M18D; A61K009/00M16; A61K009/107D <-- |
| | US 5993846 | ECLA | A61K009/00M18D; A61K009/00M16; A61K009/107D <-- |
| AB | Novel compns. are provided for administering drugs. to mucosal surface using bioadhesive emulsions of the "lipid-water" type containing suitable drugs. Thus, a solution of Carbopol-940 0.250 g and glycerol 11.2 g in 420 mL water was mixed with an oil phase consisting of pilocarpine 10.5, medium-chain triglycerides 21.2, Lipoid E-75 3.75, and Miranol MHT 7.8 g. The mixture was further mixed with 50 mg thiomersal and 1.0 g chlorobutanol in 50 mL water. | | |
| ST | bioadhesive emulsion drug delivery; polymer surfactant bioadhesive emulsion; Carbopol 940 triglyceride bioadhesive emulsion | | |
| IT | Steroids, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anabolic; bioadhesive emulsions for enhanced drug delivery) | | |

IT Adrenergic antagonists
 Analgesics
 Anesthetics
 Antibiotics
 Anticonvulsants and Antiepileptics
 Antidepressants
 Anxiolytics
 Cholinergic agonists
 Cryoprotectants
 Drug bioavailability
Eye
 Fungicides and Fungistats
 Inflammation inhibitors
 Miotics
 Mucous membrane
 Neoplasm inhibitors
 Surfactants
 Virucides and Virustats
 (bioadhesive emulsions for enhanced drug delivery)

IT Amino acids, biological studies
 Cardiolipins
 Estrogens
 Glycerides, biological studies
 Glycosaminoglycans, biological studies
 Hormones
 Lysophosphatidylcholines
 Paraffin oils
 Phosphatidic acids
 Phosphatidylcholines, biological studies
 Phosphatidylethanolamines
 Phosphatidylglycerols
 Phosphatidylinositols
 Phosphatidylserines
 Phospholipids, biological studies
 Polymers, biological studies
Prostaglandins
 Siloxanes and Silicones, biological studies
 Vitamins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bioadhesive emulsions for enhanced drug delivery)

IT **Prostaglandins**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (I, bioadhesive emulsions for enhanced drug delivery)

IT Lipoproteins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (apo-, bioadhesive emulsions for enhanced drug delivery)

IT Intestine
 (colon, bioadhesive emulsions for enhanced drug delivery)

IT Lecithins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (egg yolk, bioadhesive emulsions for enhanced drug delivery)

IT Pharmaceutical dosage forms
 (emulsions, bioadhesive emulsions for enhanced drug delivery)

IT Pharmaceutical dosage forms
 (emulsions, topical, bioadhesive emulsions for enhanced drug delivery)

IT Fatty acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (esters, bioadhesive emulsions for enhanced drug delivery)

IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxylated, bioadhesive emulsions for enhanced drug delivery)

IT Alcohols, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fatty, bioadhesive emulsions for enhanced drug delivery)

IT Alcohols, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (fatty, ethoxylated, bioadhesive emulsions for enhanced drug delivery)

IT Tranquilizers and Neuroleptics
 (major, bioadhesive emulsions for enhanced drug delivery)

IT Glycerides, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (mono-, bioadhesive emulsions for enhanced drug delivery)

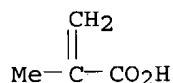
IT Peptides, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oligo-, bioadhesive emulsions for enhanced drug delivery)

IT 52-53-9, Verapamil 53-86-1, Indomethacin 54-71-7, Pilocarpine hydrochloride 57-88-5, Cholesterol, biological studies 79-41-4D, Methacrylic acid, derivs., polymers 92-13-7, Pilocarpine 151-21-3, Sodium dodecyl sulfate, biological studies 9000-36-6, Karaya gum 9000-65-1, Tragacanth gum 9000-69-5, Pectin 9003-01-4, Poly(acrylic acid) 9003-39-8, PVP 9004-32-4 9004-54-0, Dextran T-70, biological studies 9004-61-9, Hyaluronic acid 9004-99-3, Simulsol M53 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-49-6, Heparin, biological studies 9005-65-6, Tween 80 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9012-76-4, Chitosan 9041-08-1, Fragmin 15307-86-5, Diclofenac 25301-02-4, Tyloxapol 25322-68-3D, PEG, fatty esters or alkyl Ph ethers 71463-34-8, Miranol MHT 76050-42-5, Carbopol 940
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bioadhesive emulsions for enhanced drug delivery)

IT 79-41-4D, Methacrylic acid, derivs., polymers 9003-01-4, Poly(acrylic acid) 9004-32-4 9005-65-6, Tween 80
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bioadhesive emulsions for enhanced drug delivery)

RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



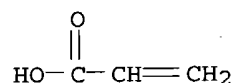
RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2



RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

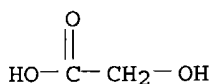
CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
CMF C2 H4 O3RN 9005-65-6 HCAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L116 ANSWER 27 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:610773 HCAPLUS

DN 119:210773

ED Entered STN: 13 Nov 1993

TI **Viscous ophthalmic pharmaceuticals**

containing cellulosic polymers and carboxy vinyl polymers

IN Ali, Yusuf; Bhagat, Haresh G.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-08

ICS A61K047-38; A61K047-32

CC 63-6 (Pharmaceuticals)

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | WO 9317664 | A1 | 19930916 | WO 1993-US1565 | 19930222 <-- |
| | W: AU, CA, JP | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9337287 | A1 | 19931005 | AU 1993-37287 | 19930222 <-- |
| | US 5460834 | A | 19951024 | US 1995-371043 | 19950110 <-- |
| PRAI | US 1992-844269 | A | 19920302 | <-- | |
| | US 1991-807528 | B1 | 19911213 | <-- | |
| | US 1992-994051 | B2 | 19921216 | <-- | |
| | WO 1993-US1565 | A | 19930222 | <-- | |
| | US 1993-31058 | B2 | 19930312 | <-- | |
| | US 1993-170482 | B1 | 19931220 | <-- | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|----|---|-------|------------------------------------|
| | WO 9317664 | ICM | A61K009-08 |
| | | ICS | A61K047-38; A61K047-32 |
| AB | Viscous ophthalmic pharmaceuticals contain a cellulosic polymer having an average mol. weight 10,000-13x10 ⁶ 0.05-5.0 and a carboxy vinyl polymer having an ave. mol. weight 500,000-6x10 ⁶ 0.05-3.0%. An ophthalmic composition containing HPMC 0.5, and Carbomer 934P 0.2% had viscosity of 6830 cP. | | |
| ST | ophthalmic pharmaceutical carboxy vinyl polymer viscosity ; cellulose deriv ophthalmic pharmaceutical viscosity ; HPMC Carbomer 934P ophthalmic pharmaceutical viscosity | | |
| IT | Adrenergic agonists | | |

Allergy inhibitors
 Anti-infective agents
 Antihypertensives
 Miotics
 Prostaglandins
 Retinoids
 Steroids, biological studies
 RL: BIOL (Biological study)
 (**ophthalmic** pharmaceuticals containing cellulosic polymers and
 carboxy vinyl polymers and, **viscous**)
 IT Neurotransmitter antagonists
 (dopaminergic, **ophthalmic** pharmaceuticals containing cellulosic
 polymers and carboxy vinyl polymers and, **viscous**)
 IT **Eye, disease**
 (**keratoconjunctivitis sicca**, treatment of, with
 ophthalmic pharmaceuticals containing cellulosic polymers and
 carboxy vinyl polymers)
 IT Pharmaceutical dosage forms
 (**ophthalmic, viscous**, cellulosic polymers and
 carboxy vinyl polymers in)
 IT Adrenergic antagonists
 (β -, **ophthalmic** pharmaceuticals containing cellulosic
 polymers and carboxy vinyl polymers and, **viscous**)
 IT 9000-81-1, Acetylcholinesterase 9001-03-0, Carbonic anhydrase
 9028-31-3, Aldose reductase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, **ophthalmic** pharmaceuticals containing cellulosic
 polymers and carboxy vinyl polymers and, **viscous**)
 IT 9004-62-0, Hydroxyethyl cellulose 9004-64-2,
 Hydroxypropyl cellulose 9004-65-3 9004-67-5, Methyl
 cellulose
 RL: BIOL (Biological study)
 (**ophthalmic** pharmaceuticals containing carboxy vinyl polymers
 and, **viscous**)
 IT 50-02-2, Dexamethasone 51-43-4, Epinephrine 51-83-2, Carbachol
 53-02-1, Tetrahydrocortisol 56-81-5, 1,2,3-Propanetriol,
 biological studies 59-66-5, Acetazolamide 92-13-7, Pilocarpine
 452-35-7, Ethoxzolamide 554-57-4, Methazolamide 7733-02-0, Zinc
 sulfate 9002-89-5, Poly(vinyl alcohol) 9003-39-8, PVP
 9004-54-0, Dextran 70, biological studies 12441-09-7D, Sorbitan, derivs.
 25322-68-3 26839-75-8, Timolol 40828-46-4, Suprofen 47141-42-4,
 Levobunolol 49697-38-3, Rimexolone 56298-24-9, Dipivalylepinephrine
 63659-18-7, Betaxolol 66711-21-5 74103-06-3, Ketorolac 85721-33-1,
 Ciprofloxacin
 RL: BIOL (Biological study)
 (**ophthalmic** pharmaceuticals containing cellulosic polymers and
 carboxy vinyl polymers and, **viscous**)
 IT 57916-92-4, Carbomer 934p 76050-42-5, Carbomer 940 91315-32-1,
 Carbomer 910 96827-24-6, Carbomer 1342
 RL: BIOL (Biological study)
 (**ophthalmic** pharmaceuticals containing cellulosic polymers and,
 viscous)
 IT 9004-62-0, Hydroxyethyl cellulose 9004-64-2,
 Hydroxypropyl cellulose 9004-65-3 9004-67-5, Methyl
 cellulose
 RL: BIOL (Biological study)
 (**ophthalmic** pharmaceuticals containing carboxy vinyl polymers
 and, **viscous**)
 RN 9004-62-0 HCAPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

RN 9004-64-2 HCAPLUS
CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
CMF C3 H8 O2

OH
|
H₃C-CH-CH₂-OH

RN 9004-65-3 HCAPLUS
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

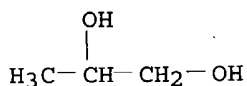
CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

CM 3

CRN 57-55-6
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

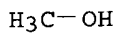
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

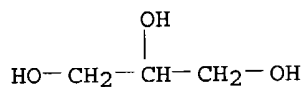
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

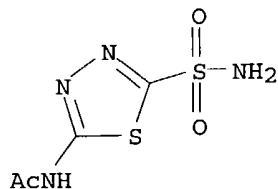
CRN 67-56-1
CMF C H4 O



IT 56-81-5, 1,2,3-Propanetriol, biological studies 59-66-5,
Acetazolamide 9002-89-5, Poly(vinyl alcohol)
RL: BIOL (Biological study)
(ophthalmic pharmaceuticals containing cellulosic polymers and
carboxy vinyl polymers and, viscous)
RN 56-81-5 HCAPLUS
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



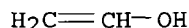
RN 59-66-5 HCAPLUS
CN Acetamide, N-[5-(aminosulfonyl)-1,3,4-thiadiazol-2-yl]- (9CI) (CA INDEX NAME)



RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
CMF C2 H4 O



L116 ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:221564 HCAPLUS
 DN 116:221564
 ED Entered STN: 31 May 1992
 TI Treatment of **ocular** hypertension with 15-ketoprostaglandin derivative
 IN **Ueno, Ryuji**
 PA Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho, Japan
 SO Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM A61K031-557
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 26

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | EP 458588 | A1 | 19911127 | EP 1991-304574 | 19910521 <-- |
| | EP 458588 | B1 | 19941130 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | CA 2042972 | AA | 19911123 | CA 1991-2042972 | 19910521 <-- |
| | CA 2042972 | C | 19961015 | | |
| | US 5208256 | A | 19930504 | US 1991-703660 | 19910521 <-- |
| | ES 2067864 | T3 | 19950401 | ES 1991-304574 | 19910521 <-- |
| | JP 04253910 | A2 | 19920909 | JP 1991-147792 | 19910522 <-- |
| | JP 07098751 | B4 | 19951025 | | |
| PRAI | JP 1990-132909 | | 19900522 | <-- | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
|------------|-------|------------------------------------|

| | | |
|-----------|-----|-------------|
| EP 458588 | ICM | A61K031-557 |
|-----------|-----|-------------|

OS MARPAT 116:221564

AB Synergistic drugs for the treatment of **ocular** hypertension comprise a 13,14-dihydro-15-ketoprostaglandin derivative and an ethoxylated sorbitan unsatd. fatty acid monoester. **Eye** drops comprised 13,14-dihydro-15-keto-20-ethyl-PGF₂α iso-Pr ester (I) 0.05, polysorbate-80 0.4, NaCl 0.8 g and water to 100 mL. The drugs (50 μL), applied to rabbit **eye**, decreased the **ocular** pressure, with only moderate side effects. The preparation of I is given.

ST **eye** antihypertensive prostaglandin sorbitan ester

IT **Glaucoma (disease)**

(treatment of, by synergistic compns. containing ketoprostaglandin derivative

and ethoxylated sorbitan esters)

IT 138829-60-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (Collins oxidation of)

IT 107-21-1, Ethylene glycol, biological studies

RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization by, of oxodecylbicyclooctane derivative)

IT 75-30-9, Isopropyl iodide

RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification by, of prostaglandin derivative)

IT 138665-26-6 141197-13-9

RL: BIOL (Biological study)
 (**ocular** antihypertensive, synergistic)

IT 9005-65-6D, mixts. with prostaglandin derivs. 138923-19-0D
 , mixts. with ethoxylated sorbitan fatty acid monoesters

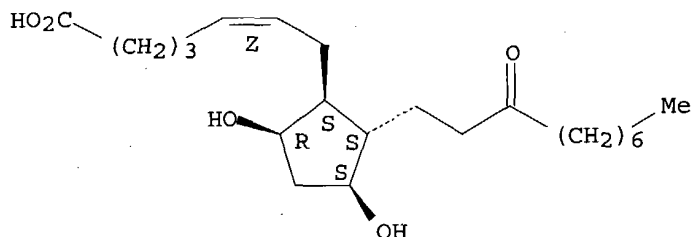
- RL: BIOL (Biological study)
(ocular antihypertensives, synergistic)
- IT 138829-67-1P 138829-69-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and Jones oxidation of)
- IT 138829-63-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and cyclization of, with ethylene glycol)
- IT 120373-42-4P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of, with iso-Pr bromide)
- IT 138829-62-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and hydrogenation of)
- IT 138829-64-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and hydrolysis of)
- IT 120373-65-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, in preparation of prostaglandin derivative as
ocular antihypertensive)
- IT 138829-61-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, with di-Me oxononylphosphonate)
- IT 138829-65-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, with tert-butyldimethylsilyl chloride)
- IT 138876-60-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reduction of)
- IT 138829-72-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and ring opening of)
- IT 138829-66-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and tosylation of)
- IT 138829-68-2P 138829-71-7P
RL: PREP (Preparation)
(preparation of, as ocular antihypertensive agent)
- IT 17814-85-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of ocular antihypertensive
prostaglandin derivative)
- IT 37497-25-9, Dimethyl (2-oxononyl)phosphonate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with bicyclooctane derivative)
- IT 18162-48-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with prostaglandin derivative)
- IT 9005-65-6D, mixts. with prostaglandin derivs. 138923-19-0D
, mixts. with ethoxylated sorbitan fatty acid monoesters
RL: BIOL (Biological study)
(ocular antihypertensives, synergistic)

RN 9005-65-6 HCAPLUS
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

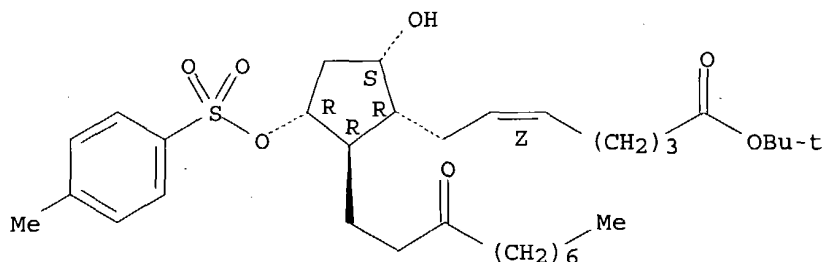
RN 138923-19-0 HCAPLUS
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



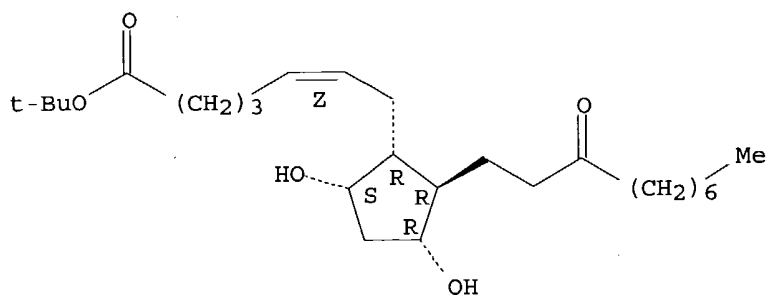
IT 138829-67-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and Jones oxidation of)
 RN 138829-67-1 HCAPLUS
 CN 5-Heptenoic acid, 7-[5-hydroxy-3-[[[4-methylphenyl)sulfonyl]oxy]-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α,5α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 138829-66-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and tosylation of)
 RN 138829-66-0 HCAPLUS
 CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α,5α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 138829-68-2P 138829-71-7P

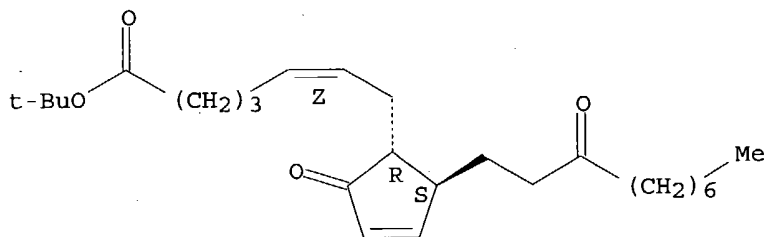
RL: PREP (Preparation)

(preparation of, as ocular antihypertensive agent)

RN 138829-68-2 HCAPLUS

CN 5-Heptenoic acid, 7-[2-oxo-5-(3-oxodecyl)-3-cyclopenten-1-yl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),5β]]- (9CI) (CA INDEX NAME)

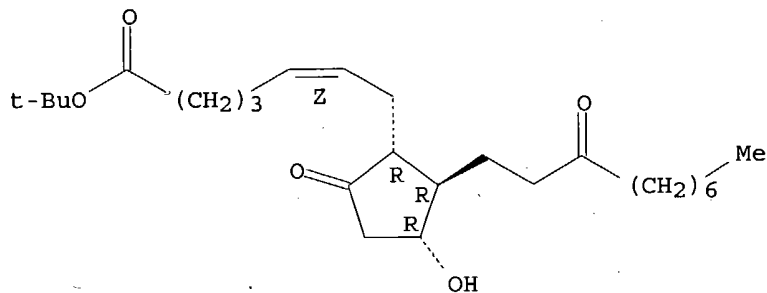
Absolute stereochemistry.
Double bond geometry as shown.



RN 138829-71-7 HCAPLUS

CN 5-Heptenoic acid, 7-[3-hydroxy-5-oxo-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L116 ANSWER 29 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:191885 HCAPLUS

DN 112:191885

ED Entered STN: 26 May 1990

TI The effect of viscoelastic materials on rabbit blood-aqueous

barrier

AU Machi, Naoko

CS Sch. Med., Jikei Univ., Tokyo, Japan

SO Tokyo Jikeikai Ika Daigaku Zasshi (1989), 104(5), 885-91
CODEN: TJIDAH; ISSN: 0375-9172

DT Journal

LA Japanese

CC 1-12 (Pharmacology)

AB The effects of Na hyaluronate (I) and methy cellulose (II) on the protein and prostaglandin content in the anterior chamber of the yee were studied in rabbits. Samples of the aqueous humor were withdrawn 6, 12, and 48 h and 7 days after the injection of I and II. Six hours after injection, I had increased the protein level to .apprx.1.5 times that of controls, and II increased it 2.4 times more than I. The prostaglandin levels showed no consistent effect. It is suggested that II induced a greater breakdown of the blood-aqueous barrier than did I.

ST blood aq human barrier hyaluronate cellulose

IT **Prostaglandins**
Proteins, biological studies
RL: BIOL (Biological study)
(of eye aqueous humor, hyaluronate and Me cellulose effect on)

IT Blood
(-aqueous humor barrier, hyaluronate and Me cellulose effect on)

IT **Eye**
(aqueous humor, -blood barrier, hyaluronate and Me cellulose effect on)

IT 9004-61-9, Hyaluronic acid 9004-67-5, Methyl cellulose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(blood-aqueous humor barrier response to)

IT 9004-67-5, Methyl cellulose
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(blood-aqueous humor barrier response to)

RN 9004-67-5 HCAPLUS

CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

=>

false hit